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CARAVSIUS ET FRATRES SUI

N. SHIEL

THOSE antoniniani struck by Carausius which bear the conjoined busts of himself, Maximian, and Diocletian together with the obverse legend CARAVSIUS ET FRATRES SVI have, since Stukeley's day,¹ been rightly regarded as among the most original of the usurpers' many imaginative issues. Accounts subsequent to the Medallist History mention other specimens, several of which can no longer be traced or at least separately identified.² By the time of his treatment of the subject for *RIC*³ Webb knew of at least ten specimens, although he only describes two varieties, both of which have Pax reverses. Pflaum⁴ provides a much more recent catalogue of these and related issues and is able to include the Moneta reverse of the Springhead coin⁵ with the comment, 'On peut prédire sans crainte de se tromper que cette série, quelle que rare qu'elle fût, se composait d'un nombre de frappes plus considérable . . .' He has indeed been proved correct in this prediction by the appearance of several new reverses in recent years, although his further suggestion that such pieces were probably also struck in gold awaits confirmation. The recently discovered specimens bring the total number of Fratres coins that I have been able to trace with certainty to seventeen.

THE COINS

There are two obverse types:

A. CARAVSIUS ET FRATRES SVI

Three busts left, conjoined radiate and cuirassed, with that of Carausius furthest away.

B. As last but each bust with raised right hand.

1. *Obv.* A *Rev.* COMES AVGGG $\frac{S/P}{C}$ Victory advancing right, wreath in right hand, long palm over left shoulder.

RIC—wt. 3.86 g., diam. 21 mm., d.a. ↑

Found *Hacheston*, Suffolk, 1973. Cf. forthcoming excavation report.

¹ W. Stukeley, *The Medallist History of Carausius*, London, 2 vols., 1757, 1759. Vol. 1, pp. 105–6 and pl. VII, no. 2. His comment that 'Charles Gray . . . one of the curators of the British Museum . . . picked it up out of a vast heap of Roman coins' from Canonium in Essex, seems to be the earliest record of such a piece.

² J. Eckhel, *Doctrina Nummorum Veterum*, viii. 46, describes a specimen then in a Genoese collection on which the bust of Carausius is radiate, that of Diocletian laureate, and that of Maximian in a lion's skin. Stevenson also alludes to this (*Dictionary of Roman Coins* (London, 1889) p. 181) giving as its first publication a letter in the *Giornali de Letterati* (Pisa, 1782), xiv. 205. He also mentions (p. 182) a specimen in the collection of the Hon. R. C. Neville. This must be the coin first published in the *Antiquaries Journal*, vi (1849), 114–23, 'Memoir on Remains of the Anglo-Roman Age at Weycock, in the parish of Laurence Waltham, Berkshire, and in the excavations there made in 1847 by the Hon. Richard C. Neville'. On pp. 119–20 he gives a description of an *RIC* I Fratres coin of obverse type A, presented to him by a local clergyman as a local find. P. H. Webb, *NC* 1907, 'The Reign and Coinage of Carausius' on p. 81 states one specimen to be in the possession of M. Naville, another 'recently found at Marlborough' in that of J. W. Brooke, and others in private collections. Of these it has proved impossible to discover any trace of the Genoese specimen or to establish with certainty the separate identity and present whereabouts of the other pieces.

³ *Roman Imperial Coinage*, vol. v, pt. 2, p. 441.

⁴ H. G. Pflaum, 'Émission au nom des trois empereurs frappée par Carausius', *Rev. Num.*, 6th ser., ii (1960), 54, esp. pp. 63–4. He also provides a concordance with *RIC* and Askews's synopsis thereof.

⁵ R. A. G. Carson, *NC* 1959, pp. 10–11, and pl. II, no. 6.

2. *Obv.* B *Rev.* As last but Victory advancing left.
RIC—wt. 4.23 g., diam. 22 mm., d.a. ↓
 Found *East Anglia*. *B.M.*
Obv. die-links 3, 4, 5, 6, 7.

3. *Obv.* B *Rev.* MONETA AVGGG $\frac{S/P}{C}$ Moneta standing left with scales and cornucopiae.
RIC—wt. 4.67 g., diam. 23 × 21 mm., d.a. ↓
 Found *Springhead*, Kent. *B.M.*
 Cf. *NC* 1959, p. 10, and pl. II, no. 6, and *Principal Coins of the Romans*, forthcoming.
Obv. die-links 2, 4, 5, 6, 7. *Rev.* die-link 4.

4. *Obv.* B *Rev.* As last.
RIC—wt. 3.54 g., diam. 21 mm., d.a. ↑
 Found Hampshire. *Private Collection*
 Glendinnings 21/11/69, lot 333, £260; Num. Fine Arts 25/3/77, lot 690, \$2,000.
Obv. die-links 2, 3, 5, 6, 7. *Rev.* die-link 3.

5. *Obv.* B *Rev.* PAX AVGGG $\frac{S/P}{C}$ Pax standing left with olive branch and vertical sceptre.
RIC 1—wt. 2.26 g., diam. 20 mm., d.a. ↓
Obv. die-links 2, 3, 4, 6, 7. *Ashmolean* (ex Evans)

6. *Obv.* B *Rev.* As last.
RIC 1—wt. 5.05 g., diam. 23 mm.
Obv. die-links 2, 3, 4, 5, 7. *Mallinson*
 Cf. *T.I.N.C.*, London, 1938, pp. 372–3, and pl. XXIII, from which I have taken the weight. I have, unfortunately, been unable to see the coin itself.

7. *Obv.* B *Rev.* As last.
RIC 1—wt. 3.73 g., diam. 23 mm., d.a. ↙
Obv. die-links 2, 3, 4, 5, 6. *B.N.*
 Cf. Webb, 1907, pl. II, no. 12; Pflaum, p. 62.

8. *Obv.* B *Rev.* As last.
RIC 1—whereabouts unknown, d.a. ↓, pierced.
 Christies 2/7/68, lot 209, £22, ex Oman

9. *Obv.* A *Rev.* As last.
RIC 1—wt. 3.55 g., diam. 23 × 21 mm., d.a. ↙
Obv. die-link 16 *B.N.*

10. *Obv.* A *Rev.* As last.
RIC 1—wt. 4.22 g., diam. 22 mm., d.a. ↓
 BM purchased at the Thomas Sale, lot 647, £22; cf *Monumenta Historica Britannica*, 1948, pl. X, no. 1; S. Stevenson, *A Dictionary of Roman Coins* (London, 1889), p. 181 (where nos. 1 and 2 are the same coin); Webb, 1907, pl. II, no. 11.

11. *Obv.* A *Rev.* As last.
RIC 1—wt. 4.12 g., diam.—d.a. ↓
 Found *Alcester*, War. *Warwick*

12. *Obv.* A *Rev.* As last but with transverse sceptre.
RIC 1—wt. 2.85 g., diam. 21 mm., d.a. ↓ *Fitzwilliam*

13. *Obv.* A *Rev.* As last.
RIC 1—wt. 3.88 g., diam. 21 mm., d.a. ↓
 Found *Brinkworth*, Wilts. *Ashmolean*
14. *Obv.* A *Rev.* As last.
RIC 1—wt. 3.17 g., diam. 22 mm., d.a. ↓
Berlin. Cf. Webb, 1907, pl. II, no. 13.
15. *Obv.* AVGGG C VA DI [] Busts right, conjoined, radiate and draped; Carausius nearest.
Rev. PAX AVGGG $\frac{S/P}{C}$ Pax standing left with olive branch and vertical sceptre.
RIC 2 (corrected)—wt. 3.21 g., diam. 20 mm., d.a. ↓
 Found *Bourton on the Water*, Glos. *Ashmolean*
Lockett, Eng. I Glendinnings 6/6/55, lot 180, £40, ex Drabble and A. H. Baldwin.
16. *Obv.* A *Rev.* VICTORIA AVGGG $\frac{S/P}{C}$ Victory advancing right, wreath in right hand; long palm over left shoulder.
RIC—wt. 3.35 g., diam. 21 mm., d.a. ↓
Obv. die-link 9. *Private Collection*
 $\frac{I}{MLXXI}$
17. *Obv.* A *Rev.* VIRTVS AVGGG $\frac{I}{MLXXI}$ Carausius, Maximian, and Diocletian standing left, each with globe and baton.
RIC—wt. 3.06 g., diam. 21 mm., d.a. ↓, pierced. *B.M.*

These Fratres coins are clearly a special part of the issue of antoniniani on which Carausius wished to associate himself specifically with Diocletian and Maximian. The majority of the surviving specimens of this issue are of the sort on which this propaganda is least obvious, simply consisting of the triple G termination of the reverse legend. Antoniniani and aurei were also struck bearing the portraits of Maximian and Diocletian, which have survived in much smaller numbers. No doubt this is a reflection of the respective size of original issues, but, in the event of a reaction against the failure of such propaganda, the most striking examples of it would have been the first to have been withdrawn or suppressed. The standard of workmanship evident in the Fratres coins is considerable as may be seen from the well-preserved specimens which show considerable detail and distinctly recognizable portraits. This, together with the paucity of surviving specimens and frequency of obverse die-links,⁶ suggests that these coins formed a special short-lived issue produced, perhaps, for distribution to selected recipients. This would have made any subsequent attempt at recall or suppression easier.

Virtually all the correctly documented examples of the Auggg coinage as a whole have either $\frac{S/P}{C}$ or $\frac{S/P}{MLXXI}$ as sequence mark. The only Fratres coin not from the C mint would appear to be an exception with only $\frac{I}{MLXXI}$ (no. 16) but such is the nature of its reverse type that there is no room left for any letters in the field. Indeed it seems unlikely that the issue as a whole lasted for a very long time and it is not numerous enough to square with having been struck from 290 to 292 as has been suggested.⁷ Die-links are

⁶ Webb, op. cit., p. 81, is misleading here with, 'It is doubtful if any two of them are from the same die'.

⁷ e.g. *RIC* v. 2, p. 442; Pflaum, p. 56.

sufficiently frequent to support this. The need to bring the issue as far forward in the usurpation as 290 has been felt because it has been assumed that its propaganda was born directly of the peace Carausius is supposed to have made with the central emperors after the unsuccessful attempt to remove him in 289. 'He may well have doubted an honest intention to keep it (i.e. the peace) on the part of Diocletian and Maximian but he took care that the fact of its conclusion should be widely publicised.'⁸ In publishing the *Fratres* coin from Springhead (no. 3) Carson⁹ suggests a date in the 'latter part of 292 when Carausius . . . found his hold on the channel coast of North Gaul coming under threat'. He further says, 'The present coin adds to the evidence which suggests that Carausius, faced with this threat, was anxious for a détente with Diocletian and Maximian.' It seems unlikely that Carausius' propaganda at this time was directed towards the central empire any more than that his legionary coins had been struck earlier to persuade imperial forces to defect to his cause. In both cases the propaganda was aimed at those within, rather than without, his sphere of influence. He clearly wished to suggest that he was on the best of terms with the so-called *Fratres* and may even have believed for a while that he was, until the elevation of Constantius early in 293 brought home the truth to all. That act may have been deliberately delayed to prolong Carausius' hopes for integration into the imperial hierarchy, until such time as the newly created Caesar could move directly against him. Diocletian and Maximian did not reciprocate with any coins issued in Carausius' name nor did they publicize their fraternity in any way.

The Auggg issues do not occur at all in what is demonstrably Carausius' last issue with the $\frac{S/P}{ML}$ mark. This is by no means an extensive issue and it might be presumed to have begun when Constantius became a Caesar and full hostility was resumed against Carausius. After that all pretensions of fraternity would have been ridiculous, but it remains possible that this issue had been phased out earlier and followed by coins with the $\frac{S/P}{MLXXI}$ mark in Carausius' name alone. Carson suggests this¹⁰ because of the pattern of marks for the C mint where the $\frac{S/P}{C}$ mark is common to the Auggg issues, Carausius' last issue in his own name alone, and the first issue of Allectus. There is not an exact parallelism between the changes of marks at these two mints, and so it is equally possible that Carausius' $\frac{S/P}{MLXXI}$ coins in his own name came first followed by the Auggg coins at which time the C mint changed its mark to $\frac{S/P}{C}$ for its complementary issues. This would allow Constantius' actions not only to be the reason for the cessation of the fraternal issues but also of their XXI value mark from the exergue of the London pieces. That this mark was not on the C coins meant no such change was necessary and the recently introduced $\frac{S/P}{C}$ mark could carry on for a full term of use.

On none of the specimens that I have seen has any of the *Fratres* anything that is clearly not a radiate crown as head-dress. Pflaum¹¹ suggests that some of the busts

⁸ Webb, *RIC* v.

⁹ Carson, *op. cit.*, p. 10.

¹⁰ R. A. G. Carson, 'Sequence-Marks on the Coinage

of Carausius and Allectus', pp. 57-65, in *Mints, Dies and Currency*, ed. R. A. G. Carson (London, 1971), esp. p. 61.

¹¹ Pflaum, *op. cit.*, p. 63.

are laureate. Webb¹² long ago refuted the suggestion of Stevenson¹³ and others that Carausius had deliberately given himself a radiate crown while leaving his colleagues bareheaded as a slight. It would appear that on all specimens in sufficiently good condition some trace of a radiate crown may be seen on all three heads, as would be expected in the case of alleged imperial equals. The only obverse which is unusual is that of no. 15 where the portraits are facing right with Carausius uppermost, and the legend appears to leave no room for a mention of the three Augusti but appears to give only Diocletian's name in full. The reverses on these coins are very ordinary types, dominated as ever by Pax. Only that of no. 17 matches the originality of the obverse. It may be that subsequent discoveries will show that other reverses which were used in the Auggg issue as a whole were also used with Fratres obverses.

The pattern of distribution of the provenanced specimens covers much of Southern Britain with two areas of concentration, East Anglia and the central south. Both of these are fruitful sources of Carausian coins in general. What is, perhaps, surprising is that none of the Fratres coins have come from military sites or from London itself. Richborough, by far the most productive source of Carausian coins, has yielded examples of other rarities such as denarii or BRI¹⁴ coins, but not a single Fratres piece. None were found in the enormous Blackmoor hoard,¹⁵ although four have provenances quite near to where that hoard was discovered. This further supports the view that these coins never entered normal circulation, despite the worn condition of some of the survivors. It may have been that these were donative pieces for favoured recipients which soon fell from favour as circumstances changed, and that some few saw a subsequent circulation as souvenirs rather than as money. The Fratres coins could represent the culmination of the Auggg issue with their production having been commenced at the C mint to which new obverse dies were sent for use in conjunction with current $\frac{S/P}{C}$ reverses. All but one of the seventeen extant coins are of such a type, yet that one is the most original, which could suggest a London production stopping almost as soon as it had begun when things went wrong in Gaul. Thus fewer London pieces would have been issued and those more easily recalled than from the C mint. Seventeen coins is too small a body of evidence from which to be too definite and this suggested schema remains a possibility for newly discovered specimens to support or disprove.

¹² Webb, *op. cit.*, pp. 82–3.

¹³ Stevenson, *loc. cit.*

¹⁴ Cf. N. Shiel, 'The BRI coins of Carausius', *NC* 1976, pp. 223–6.

¹⁵ For details and bibliography see N. Shiel, *The Episode of Carausius and Allectus*, British Archaeological Reports, 40 (1977), 51.



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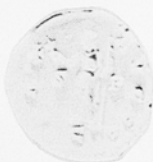
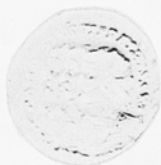
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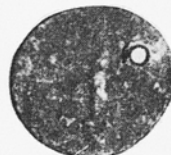
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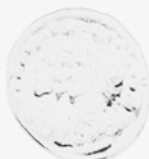
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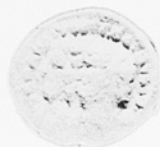
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17

CHEMICAL ANALYSES OF ENGLISH SCEATTAS

D. M. METCALF

THE problems of dating and attributing the hundred or more varieties of English sceattas cannot be fully solved by the sovereign method of hoard-analysis, since so few hoards or grave-finds are known (and those few are mostly early and east Kentish). The typological arguments of an earlier generation of scholars have rightly been called in question by Morehart.¹ The style of the coins is extremely varied, and, as fewer than ten specimens each are known for most varieties, stylistic argument is often inconclusive. In these circumstances information about the metal contents of the sceattas is not to be neglected. The series shows a wide range of alloy, covering every degree of fineness from c. 98 per cent silver to c. 20 per cent silver. Coins of the same variety tend to be very much the same in their composition, and a progressive debasement beginning in the 730s or thereabouts has been postulated. Analytical results should help to place the varieties in their correct chronological sequence, and may yield other incidental information of historical value.

Summary of previous work. A few sceattas from Frisia were analysed and the results presented briefly by Rethaan Macarè in 1838 and 1856. The starting-point for modern studies was the analysis of the eight coins in the Southend hoard, and of two sceattas of *Pada* by Forbes and Dalladay. Their figures were published in *BNJ* 1961.² X-ray fluorescence analyses of a numbered series of 112 sceattas were undertaken in the 1960s by Mrs. J. M. Merrick, Miss L. K. Hamblin, and D. M. Metcalf, and the results were published in a series of articles and in a book, *Studies in the Composition of Early Medieval Coins*.³ These sceattas were all analysed by the 'Milliprobe', in the Research Laboratory at Oxford.

The new programme of analysis. A new series of analyses was planned and undertaken in 1976-7 by Metcalf, using a second-generation spectrometer, the 'Isoprobe'. The programme benefitted from McKerrell's published work on Anglo-Saxon coins and his experiments on trace-elements, and also from concurrent programmes on the Isoprobe by Mayhew on sterlings and by King on late Roman coinage. It was intended to be supplementary to the foregoing researches on sceattas in the following respects:

(i) It seemed desirable to try to repeat some of the earlier results, measuring the same coin at the same spot on the edge. The correspondance was for the most part adequate. The main point which emerged was that Mrs. Merrick had sometimes been too gentle in abrading a cleaned area on the edge of the coin, so that the results were still being influenced by surface enrichment (or depletion)—usually, it would seem, because the abraded area was not large enough (given the difficulties of positioning such tiny objects) for the X-ray beam to fall completely within it. Mr. Mayhew's experiences in 1977 in the analysis of sterlings were helpful here.

¹ M. Morehart, 'Some Dangers of Dating Sceattas by Typological Sequences', *BNJ* xxxix (1970), 1-5.

² J. S. Forbes and D. B. Dalladay, 'Composition of English Silver Coins (870-1300)', *BNJ* xxx (1960-1), 82-7, and an appendix to Rigold's paper in the same volume, at pp. 52-3.

³ The numbering of the sceatta analyses is given in parentheses after each publication. S. C. Hawkes, J. M. Merrick, and D. M. Metcalf, 'X-ray Fluorescent Analysis of Some Dark Age Coins and Jewellery', *Archaeometry*, ix (1966), 98-138 (F. 1-10, O. 14, O. 16-20); D. M.

Metcalf and J. M. Merrick, 'Studies in the Composition of Early Medieval Coins', *NC* vii (1967), 167-81 (O. 38); D. M. Metcalf, J. M. Merrick, and L. K. Hamblin, *Studies in the Composition of Early Medieval Coins*, Newcastle upon Tyne, 1968 (Ca. 1-10, Sc. 1-2, O. 41-84, Ly. 1 2, Y. 1 5); D. M. Metcalf and L. K. Hamblin, 'The Composition of Some Frisian Sceattas', *Jaarboek voor Munt- en Penningkunde*, iv (1968), 28-45 (O. 118-42, M. 1 6). (The missing numbers O. 143-84 are other Dark Age coins published in *Archaeometry*, xi and xii.)

(ii) The availability of a radioactive source (^{241}Am) in connection with the Isoprobe opened up the possibility of rather more accurate (surface) measurement of traces of tin. This has turned out to be an interesting diagnostic element in the sceatta series: preliminary results were announced by Metcalf and Walker in 1976. Below about 1 per cent Sn the repeatability of the results is not good, and individual results less than c. 0.5 per cent in relation to silver, as measured by the Isoprobe, should be considered merely as < 0.5 per cent. Where they are below this level the measured values have nevertheless been printed, to give a better idea of the general contrast in tin contents between early sceattas and the later series.

(iii) X-ray fluorescence using such a low-powered spectrometer is really a very unsatisfactory technique for the accurate measurement of trace-elements in silver and silver-copper alloys. The zinc peak, for example, falls between the first and second copper peaks, and is swamped by them. The reading for gold is similarly affected by the presence of zinc. These two metals can at best be estimated from the aggregate peak heights. Lead was not measured quantitatively in many of the analyses of the 1960s. Accurate measurement, of gold as well as lead, in the multi-channel analysis for which the Isoprobe is designed, is hampered by 'background noise', and peak height measurements may tend to overstate the smaller amounts. The main point here is that all the measurements for a particular trace-element should be made by the same method, if comparisons of trace-levels in different series of sceattas are to have any validity. The repeatability of the peak-height measurements was good, and within-series variations should be reliable, even if the absolute calibration of small values presents difficulties.

(iv) The same techniques of analysis and the same procedures for calculation were used for the 1977 sceatta programme and a 1976-7 programme of analyses of contemporary Merovingian silver coins (to be published in the volume presented to Philip Grierson) to ensure comparability.

Abbreviations. The analyses are numbered in continuation of the earlier series, the prefixed letters O and M standing for Oxford and Metcalf, to indicate the collection where the coin is found. The percentage contents of solid metal are given to one decimal place, but this does not imply a corresponding degree of accuracy or even repeatability, merely computational convenience. A dash signifies below the level of detection; nd means not determined, i.e. not looked for.

Series Pa. Two thrymsas of Pada were found to contain 30 and 26% gold respectively (F. 2, O. 13). Forbes and Dalladay analysed two sceattas of Pada, which may both be contemporary counterfeits. One other specimen (O. 14) has been analysed. The Pada found at Kew is a thrymsa with c. 40% gold in the surface layers.

Series Va. A thrymsa was found to contain 10% gold (O. 15). Another, in Professor Grierson's collection,⁴ gives the following results:

	Ag	Cu	Au	Pb	Zn	Sn	'Gold'
G. 101	85.6	4.3	7.9	1.3	0.8	0.23	94.7

O. 16-17 and Ca 1 show an alloy closely comparable with the best of the primary sceattas.

(*Series F.* A thrymsa in this series is discussed below.)

Series A. Previously published analyses were of one coin from the Southend find and two from Finglesham—all showing 95% silver, 1-2% gold, and 3-3½% copper. Lead added 0.64% in the Southend coin, so that the 'silver' contents of series A (silver plus gold plus lead) could be estimated at c. 97%.

The most surprising of the new results was that A2, 2a turned out to contain almost enough gold for it to be considered as a thrymsa.⁵ It is difficult to argue that this was unintentional, and there may therefore be implications for the relative chronology of Pada and Series A.

⁴ One hundred analyses of Merovingian silver coins, made using the same instrument, the same standards and calibration, and the same analytical procedures and methods of calculation, are published in the volume of studies presented to Philip Grierson. Five Anglo-Saxon coins analysed at the same time are included here in a

slightly simplified form, with the numbering G. 101-5.

⁵ The range of values quoted for gold is because exactly suitable standards were not available. The coin was, however, analysed at two different places on the edge, with consistent results.

		Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 185	A2, 2a	84.5	6.8	6.2/7.5	0.5	1.3	(0.25)	91.8
O. 186	A2, 2b	93.7	4.3	0.8	1.0	0.2	—	95.5
O. 187	A2, 4f	91.7	5.9	1.2	1.15	—	(0)	94.05
O. 188	A3, 2b	93.5	5.3	0.65	0.55	—	(0)	94.7
O. 189	A3, 15a	92.5	5.8	0.7	0.95	—	(0.1)	94.15
O. 185	1.29 g.	Evans bequest.			O. 188	1.14 g.	Evans bequest.	
O. 186	1.25 g.	Ex Barnett duplicates.			O. 189	0.96 g.	Purchased 1940. Found at Compton.	
O. 187	1.27 g.	Ex Barnett duplicates.						

Although these are not the identical coins, they suggest that, with sufficient preparation of the sample area, slightly lower silver values could have been obtained than those that were published. (The Southend results may have been influenced by previous electrolytic cleaning.) Surface examination of coins with a golden tinge failed to reveal any trace of gilding.

Series B. Previous analyses: F. 5-10 (all B1) and Southend 2-3 (both BII, 3)—90-95% silver, 2-5% gold, and 3-5% copper; 'silver' contents 95½-97½%.

		Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 190	BIA, 4	92.8	5.5	0.7	0.6	—	(0.4)	94.1
O. 191	BIA, 7	93.5	4.5	0.4	1.5	—	(0.1)	95.4
O. 192	BlB, 1	93.5	4.8	0.8	0.9	—	(0)	95.2
O. 193	BIC, 4	92.9	4.6	1.15	1.0	0.35	(0)	95.1
M. 7	cf. BII, 3	93.0	5.4	0.5	0.9	—	(0.2)	94.4
O. 194	BII, 4i	93.1	4.5	0.4	0.8	0.3	0.9	94.3
O. 195	BII, 11	90.7	6.7	0.8	1.0	—	0.8	92.5
O. 190	1.24 g.	Ex Barnett duplicates.			M. 7	1.25 g.	Found at Hunsbury.	
O. 191	1.18 g.	Ashmolean ancien fonds.			O. 194	1.08 g.	Evans bequest. Found at Birchington.	
O. 192	1.26 g.	Evans bequest.			O. 195	1.09 g.	Bodleian Library ancien fonds.	
O. 193	1.26 g.	Evans bequest.						

Contrary to the indications of the earlier results, there is no significant difference between series A and B, and certainly no systematic difference in the gold traces. BIB (variety with bust) shows no difference from BIA and C (with head). BII, 4 and BII, 11, however, have rather higher tin contents.

Series C. Five primary runic coins in the Southend hoard were analysed by Forbes and Dalladay. They are of variety R1a (9490, 9494), R1a with standard inverted (9493), and R1b (9491-2). Their 'silver' contents are very high. Six other coins, O. 66-71, varied from c. 85% to c. 94½% 'silver', with high lead contents in the poorer coins. Five were reanalysed, with the following results:

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 66	92.97	4.89	0.42	0.88	0.34	0.49	94.27
O. 67	92.55	5.70	0.50	0.69	0.17	0.39	93.74
O. 68	92.65	6.12	0.37	0.86	—	—	93.88
O. 69	91.80	6.49	0.39	0.78	—	0.54	92.97
O. 71	90.04	6.26	0.72	1.00	0.43	1.54	91.76

On the basis of the new results, there is no early decline in the alloy of the primary runic series, and the only perceptible difference between it and the alloy of series A and B is the presence of small amounts of tin. The zinc and tin values are rather high in comparison with the Southend results, but it is difficult at present to judge the reason.

Series D. Previous analyses of the Frisian runic types are O. 118-20 and O. 121 (*BMC* type 8). A destructive analysis by Rethaan Macaré gave 92.5% Ag, 5.9% Cu, 1.6% Au. To these can now be added:

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 196	91.40	5.83	0.81	0.88	0.41	0.68	93.09
O. 197	89.19	8.39	1.01	0.93	—	0.49	91.13

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 198	91.74	5.13	1.14	1.16	0.82	—	94.04
O. 199	92.11	4.34	1.49	1.00	0.62	0.43	94.60
O. 200	90.90	5.60	0.85	1.23	0.56	0.87	92.98
O. 196	0.88 g.	Ex G. E. L. Carter.			O. 199	1.11 g.	Ex Carter.
O. 197	1.23 g.	Ex Carter.			O. 200	0.67 g.	Ex Carter.
O. 198	1.12 g.	Ex Carter.					

The 'silver' is almost as good as that of the English primary series. The gold traces are marginally higher; zinc is apparently a more regular constituent; and the pattern for tin is comparable with that in series C.

Series E. The early porcupines are of good silver, like the other primary sceattas (O. 20, O. 38, O. 41, Sc. 3). The 'Æthiliræds', etc. (O. 42-4) are also of good silver; but the Frisian finds (O. 138-42, M. 1-6, all probably from the Kloster Barte hoard) show a decline to around 80% silver.

A detailed reappraisal of the metal contents of the porcupines has been left on one side, but they have been checked for tin. The early English varieties (voic, G, plumed bird) contain only negligible amounts of tin, matching Series A and B. The Kloster Barte coins contain tin in variable amounts up to 3%. One of the Æthiliræd coins (O. 43), contains c. 2% tin, the other, O. 42, c. 0.8%, and there is therefore some reason to suspect that they are late revivals, rather than from the primary phase.

Series F. These coins (*BMC* type 24), which are of uncertain attribution, span the transition from pale gold to silver in the same way as the issues of Pada and Varimundus. No comparable transitional series have yet been found in the Merovingian coinage. There are several specimens of type 24 in the Hunter collection and in the British Museum (pre-1837), and the presumption that the type is English is further increased by a find from Wareham.⁶ The design is variable (like those of Pada and Varimundus), and the legends extremely blundered. Many specimens (but not the earliest) incorporate the votive TT/II formula, presumably an eclectic borrowing from series A. This again argues for an English origin. It is intriguing to speculate on the mint: Southampton is an obvious candidate, even though no specimens have been found in the excavations. In any case, the recognition that Series F is English should further modify the view that the sceattas had a single point of origin in east Kent.⁷ Four specimens in Professor Grierson's collection were analysed at the same time as his Merovingian series.⁸

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
G. 102	84.51	4.20	9/10.6	—	1.41	0	(94.3)
G. 103	91.90	5.60	0.69	1.49	0.17	0.17	94.1
G. 104	92.30	4.85	1.14	0.97	0.15	0.60	94.4
G. 105	93.06	5.41	0.78	0.76	0	0	94.6
G. 102	1.15 g.	Bought from a London dealer.			G. 104	1.07 g.	Ex Grantley.
G. 103	1.12 g.	Ex Grantley.			G. 105	1.10 g.	Ex Grantley.

Series G. Reanalysis confirmed the high gold, lead, and tin contents of *BMC* type 3a. O. 124 (c. 85% silver), and an imitative coin, O. 125 (c. 52% silver), although a higher silver value was obtained from O. 124, a very corroded coin. Two stylistically degenerate coins (which may be continental) proved to be very base, with large amounts of tin:

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
M. 8	90.7/88.9	6.8	0.59	1.22	0.68	n.d.	c. 91.6
O. 201	37	54	—	—	—	8/10	37
O. 202	22	65	—	—	—	11/15	22
M. 8	1.06 g.	Ex Lockett 214.			O. 202	1.10 g.	Ex Carter.
O. 201	0.94 g.	Ex Carter.					

⁶ S. E. Rigold and D. M. Metcalf, 'A Check-list of English Finds of Sceattas', *BNJ* xlvii (1977), 31-52, s.v.

⁷ D. M. Metcalf, 'Monetary Expansion and Recession: Interpreting the Distribution Patterns of Seventh-

and Eighth-century Coins', *Coins and the Archaeologist* (ed. J. Casey and R. Reece), British Archaeological Reports, IV, 1974, 206-23.

⁸ See note 4 above.

Series H. Previous analyses for the Hamwic series (O. 60, Ca. 6) were on the high side. The chronological ordering of the series remains uncertain.

		Ag	Cu	Au	Pb	Zn	Sn	'Silver'
H1 (<i>BMC</i> type 49)								
	O. 203	85.60	8.16	0.67	1.59	0.40	3.58	87.86
	Ca. 6	62.79	33.07	0.20	1.05	—	2.88	64.04
H2 (<i>BMC</i> type 39)								
	O. 60	67.38	29.57	0.52	1.16	—	1.36	69.06
H3 (<i>BMC</i> type 48)								
	O. 204	62.78	26.91	1.61	4.04	—	4.66	68.43

O. 203 0.82 g. Ex Shortt. Found in 'South Hampshire'? O. 204 0.78 g. Same provenance as last.

The tin contents are similar to those found in the 'bird and branch' coins.

Series J. Previous analyses of J1 (otherwise BIIIb) and J4 (*BMC* type 37) showed them to be of good silver, but often counterfeited (O. 18-19, Ca. 2-3, Sc. 1-2; also the Banbury and Repton find). Some of the figures for silver were, again, too high.

		Ag	Cu	Au	Pb	Zn	Sn	'Silver'
J1	O. 18	86.35	10.67	0.51	0.64	—	1.82	87.50
J4	Ca. 3	91.04	6.07	0.73	1.31	—	0.85	93.08
	O. 205	87.59	8.87	0.64	1.07	—	1.83	89.30
	O. 206	87.38	7.60	0.24	0.76	2.20	1.82	88.38
	O. 19	82.21	14.51	0.35	0.87	—	2.07	83.43

O. 205 0.68 g. Evans bequest. O. 206 1.01 g. Evans bequest.

There are very clear contrasts between series B and J. The 'silver' contents are lower; and tin is present in the alloy as a minor constituent. This raises interesting questions about the routes by which it was obtained, and about the practices of metal-working on which the mint drew. Zinc is present in one coin (as it is in Sc. 2).

Series K. The 'wolf' sceattas (*BMC* types 32-3) and related types (*BMC* types 20, 42, 52) have yielded silver analyses ranging from 65-70% down to 45-50% or less (O. 47-8, O. 62-4, O. 65). They await full reanalysis. Two coins from Walbury Camp give additional results, which may be affected by their deeply corroded fabric, and probably exaggerate the silver contents.

		Ag	Cu	Au	Pb	Zn	Sn	'Silver'
<i>BMC</i> type 42								
	O. 206 bis	81.3	14.9	0.32	0.52	—	2.93	82.1
<i>BMC</i> type 52 var								
	O. 207	c. 84.4	c. 10.4	nd	nd	nd	4.27	c. 85

O. 206 bis. 0.93 g. Reading Museum. Found at Walbury Camp.
O. 207 0.97 g. Purchased 1977. Found at Walbury Camp.

Series L. It seems clear that the measurement of tin was accidentally omitted in some of the published analyses, O. 49 and O. 52-5. All the coins reanalysed in fact contain very substantial amounts of tin. If debasement is any guide to the chronology of the sceatta series, the coins signed *Lundonia* cannot follow swiftly upon the primary phase. If they were seen as marking Æthelbald's taking control of London probably in 731 or 732, it would be necessary to move the end of the primary phase back, perhaps as much as a decade, from the date that has hitherto been envisaged. The historical interpretation of *BMC* type 12 should therefore probably be modified.

	Ag	Cu	Sn	'Silver'
<i>'London' style</i>				
<i>BMC type 12</i>				
M. 9	47.5	48.5	4	c. 47.5
O. 53	27.5	61.5	11	c. 27.5 (T)
<i>BMC type 16/15b</i>				
O. 49	23.5	66.5	10	c. 23.5 (T)
<i>BMC type 15 and var</i>				
O. 54	18	69	13	c. 18 (T)
O. 55	20	69	11	c. 20 (T)
<i>'Hwiccan' style</i>				
<i>BMC type 18/20</i>				
O. 52	16	64	20	c. 16
<i>BMC type 15</i>				
O. 208	15	53.5	31.5	c. 15

M. 9 0.85 g. Ex Glendining, 9 June 1976.

O. 208 0.70 g. Found at Shakenoak.

The coins from the Thames hoard (marked T) have a thick patina. Tin was therefore measured on the cleaned edge of those four coins.

Series M. All three specimens of type 45 are probably corroded and leached throughout their fabric, and the measured silver contents may accordingly be too high.

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
M. 10	72.5	23.9	0.4	1.0	0.7	1.35	73.9
O. 209	54	42	nd	nd	nd	4	c. 54
O. 210	50	46.5	nd	nd	nd	3.5	c. 50

M. 10 0.98 g.

O. 209 0.91 g. Purchased 1977. Found at Walbury Camp.

O. 210 1.03 g. Bodleian Library ancien fonds.

The unique specimen of type 62 was similar:

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 211	38.26	52.83	0.07	0.28	—	8.56	38.61

O. 211 0.88 g. Ex Passmore. Found near Oxford.

Series N. No analyses have been made.

Series O. BMC type 40 (analysis O. 50) gave a range of 62–74‰, but remeasurement reveals that this was too high:

O. 50	54.40	42.74	0.39	0.43	—	2.04	55.22
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One specimen of type 57 was available for analysis:

O. 212	60.20	36.90	0.33	0.74	—	1.84	61.27
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O. 212 1.02 g. Evans bequest.

Series Q. O. 79 is comparable in its alloy with the other East Anglian types.

Series R. A good selection of series R, including derivatives of the substantive type originally called R2, have been analysed (Ca. 7–10, O. 73–8 and 80–1). Where tin was not recorded (O. 75, 77), its presence has now been confirmed, suggesting the following modified results (not complete reanalysis).

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 75	39–44	49–54	$\frac{1}{4}$	2.8	*	3.7–4.2	42–7
O. 77	21–3	59–61	$\frac{1}{4}$	6.4	*	11.5	27 $\frac{1}{2}$ –29 $\frac{1}{2}$

The Normanby find (M. 11), for which provisional figures were given in *BNJ* 1976, has been reanalysed in line with the other results published here, as has Ca. 8 (type 70), and a sceat resembling the earliest pennies (M. 12), both of which may be late revivals.

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
M. 11	48.39	44.67	0.27	0.89	—	5.77	49.55
Ca. 8	72.69	22.96	0.41	0.69	—	3.25	73.79
M. 12	58.83	37.61	0.45	1.14	—	1.97	60.42

M. 11 1.04 g. Glendining, 20 July 1976. Found at Normanby.

M. 12 0.94 g. From Norwich area.

Series S. Reanalysis of the 'late' sphinx coin, Lockett 265, after more thorough abrasion of the edge, contradicted the earlier conclusion that it was of 80–85% silver. The new figures are:

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
M. 13	48.25	50.22	0.25	0.29	—	0.98	48.79

M. 13 1.12 g. Ex Lockett 265.

Series T. O. 45 gave 60–74% silver.

Series U. Two 'bird and branch' coins previously analysed (O. 58–9) were found to be rather variable in their silver contents. Consistent readings were obtained by reanalysis.

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
'Mercian' style							
O. 213	88.94	7.21	0.52	0.87	—	2.45	90.33
O. 58	81.51	15.52	0.23	0.39	—	2.35	82.13
'London' style							
M. 14	82.56	8.67	1.55	2.44	—	4.79	86.55
O. 59	79.66	18.08	0.32	0.36	—	1.57	80.34
M. 15	65.22	26.64	0.72	1.45	—	5.97	67.39

'Archer' type

O. 214 70.69 23.56 0.57 0.94 — 4.24 72.20

O. 213 1.07 g. Purchased 1971. Found at Abingdon.

M. 14 — (Formerly Metcalf colln.)

M. 15 0.93 g.

O. 214 1.13 g. Glendining, 9 February 1977. Found at or near Walbury Camp.

The Abingdon find, O. 213, which is of elaborate style, also has the highest silver contents. The series evidently witnessed a decline from c. 90% to c. 80% and perhaps further. (The result for M. 15 is provisional, as the coin was abraded only very slightly.)

Type 23a (O. 51) gave 38–40% silver. Type 23e (O. 56–7) gave c. 30–35% silver, and both specimens contained some zinc.

Series V. The she-wolf and twins type was found, upon reanalysis, to contain a substantial amount of tin, which had not previously been measured. The silver reading was affected by surface enrichment, as O. 46 *bis* presumably was also.

	Ag	Cu	Au	Pb	Zn	Sn	'Silver'
O. 46	57.68	36.88	0.44	0.74	—	4.26	58.86

Series W. No analysis has been made.

Series X. Earlier information is discussed in connection with analyses O. 122–3 (92–94% and 34–39% 'silver' respectively). A provisional analysis of the Tackley find showed 80–84% silver at the surface.

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Series Y. Analyses Y. 1-5, O. 82-4, and Ly. 1-2 range from c. 85% down to c. 50%. In the context of later Northumbrian alloys, the results have been interpreted as suggesting a chronic shortage of silver stocks.⁹

Series Z. An East Saxon attribution has been proposed for the type, which imitates one of Cunobelin.¹⁰ Analysis Ca. 5 gave 65-74% silver.

⁹ G. R. Gilmore and D. M. Metcalf, 'Neutron Activation Analysis of Drillings from Northumbrian Stycas', *Edinburgh International Symposium on Scientific Archaeology* (forthcoming).

¹⁰ D. M. Metcalf, 'Twelve Notes on Secatta Finds', *BNJ* xlvii (1976), 1-18, at p. 12. The type is copied from Mack 223.

THE HIBERNO-NORSE COINS IN GOTLANDS FORNSAL, VISBY

MICHAEL DOLLEY

IN active preparation is a fascicle of the British Academy's *Sylloge of Coins of the British Isles* wherein will be illustrated approaching 500 Hiberno-Norse pennies in the Royal Coin Cabinet (KMK) at Stockholm. More than 400 of these were struck during the first two decades or so of the eleventh century, and their neglect by Irish students over the past century and more can only be termed deplorable. The great majority of the Stockholm coins derive from discoveries of quite literally tens of thousands of Viking-age coins that have been made on Gotland, an island that geographically could be thought to occupy much the same position in the Baltic as Man in the Irish Sea. During two visits to Scandinavia in the late summer of 1976 the writer came to the conclusion that the time was probably ripe for an investigation of the Irish material actually preserved in the really quite magnificent museum at Visby known as Gotlands Fornsal (GF). Founded by local initiatives a century or so ago, this institution is a shining example of what can be achieved when public money at the national level is used judiciously to supplement insular resources and, above all, enthusiasms.

Disappointingly few locally found coins in fact are on exhibition at GF, official policy at government level being to send over on long-term loan from Stockholm a very limited number of the hoards which, under the Swedish law of treasure trove, all go in the first place to KMK. At present, too, even this number is artificially low because of the legitimate requirements of continuing work on the *Corpus Nummorum saeculorum IX-XI qui in Suecia reperti sunt* of which the first fascicle (edd. B. Malmer and †N. L. Rasmusson) appeared in 1975, the second in 1977. Published already by the present writer in the 1957 number of *Gotländskt Arkiv* (p. 50) were the two Hiberno-Norse pennies in the 1952 hoard from Gandarve in Alva parish (GF 9851; G. Hatz, *Handel und Verkehr zwischen dem Deutschen Reich und Schweden in der späten Wikingerzeit* (Stockholm, 1974), no. 263), and vol. 98 (1968) of the *Journal of the Royal Society of Antiquaries of Ireland* (pp. 57-62) lists in a paper from the same pen the fifteen (*recte* fourteen?) Dublin coins from the 1966 discovery at Karls in Tingstäde parish (GF 10396; Hatz 232), while on pp. 197-9 of the same volume there are described the three (*recte* two) Hiberno-Norse pennies from the enormous Burge treasure of 1967 from Lummelunda parish (SHM Inv. 28830; Hatz 375), though this hoard has yet to be returned to the island. Interestingly, no Dublin coin appears to have been present in the most recent of all the Gotland hoards of the eleventh century, the discovery of 130 Viking-Age silver coins at Liffride in Lärbo parish duly noted by the excavator, Miss Anna-Lena Gerdin, on p. 116 of the 1974 volume of *Gotländskt Arkiv*. On the face of it, this hoard was concealed as late as the 1020s, in which case there should have been plenty of time for Hiberno-Norse coins to have

found their way into it, but an examination of the actual coins made possible by the personal kindness of *amanuens* Ragnar Engeström of the National Antiquities Service's special Gotland Excavations Unit (RAGU) revealed that it is essentially a hoard of Digeråkra type (SHM Inv. 18744; Hatz 104), with the insular element exhibiting an abrupt 'cut-off' *c.* 998, to which there was added at the time of concealment a handful only of later pieces. Recent work has suggested that the Hiberno-Norse coinage did not begin to be struck before the summer of 997, and it was quite literally only at the very end of the tenth century that Dublin coins began to reach Scandinavia in any quantity. We may disregard, then, any possibility that the major discovery of perhaps as many as 1,750 coins made *c.* 1973 at limestone workings at Smiss in Tingstäde parish included Hiberno-Norse pieces. Several hundred coins only from other series have been recovered to form the basis of a successful prosecution of the finders for non-disclosure, and these suggest that concealment took place no later than *c.* 999—information from Mr. Kenneth Jonsson of Stockholm who publishes the parcel in a forthcoming number of *Numismatisk Årsskrift*. For the sake of completeness, too, mention should perhaps be made of the July 1972 find at Burge in Lummelunda parish (SHM Inv. 29559–62; Hatz, p. 232) noticed by the present writer on p. 450 of the 1972 *Numismatic Circular* (cf. *Gotländskt Arkiv*, 1972, p. 111). The hoard appears to have been concealed at about the same time as the slightly larger find from Liffride, but with fewer than 100 coins present the absence of Hiberno-Norse coins could well be fortuitous.

From the foregoing citation of the more recent finds it should be clear that over the last two centuries the soil of Gotland has given up Dublin pennies of Sihtric Silkbeard quite literally by the hundred, and it must be borne in mind that over the last few decades the incidence of discovery of hoards seems to have fallen sharply as against earlier experience. Sad to say, the Dublin series today is represented in the systematic collections of GF by no more than the odd specimen! Essentially, the Visby cabinet derives from the collections finally made over to it in the early part of this century by the old Grammar School of the city which in due course became known as *Visby Elementarläroverk* (VE). On the early history of the numismatic portion of these collections we are indeed fortunate enough to possess a remarkably detailed study from the pen of one of the more competent of Gotland's amateur antiquaries, Richard Steffen (1862–1948), who after his 1928 retirement from the headmastership devoted the rest of his life to the herculean task of bringing into order the island's archives, work recognized by the State two years before his death with the grant of the title of Professor (cf. *Gotländskt Arkiv*, 1948–9, pp. 7–12, and for a list of his earlier writings *ibid.* 1942, pp. 213–22). This history of the VE cabinet was published in 1928 in a limited edition (100 copies) as a separately paginated (1–38) supplement to the school's annual report (R. Steffen, 'Anteckningar om Visby högre allmänna läroverks Mynt- och antikvitetsamling', *Högre Allmänna Läroverkets i Visby Årsredogörelsen*, 1928). From it we learn of a manuscript fair copy catalogue, unfortunately incomplete, dating from the early 1840s and entitled *Inregistreringsbok för Visby Gymnasii Mynt, Medaljer och Antikviteter*. Kept now in GF, it suggests that the original collections were relatively richer then than at the time of their transfer. Listed by the honorary curator, the Revd. Dr. Johan Enequist (1787–1856), a member of the staff since 1821, are some 200 coins, mainly classical, oriental,

Anglo-Saxon, and medieval German, which were acquired between 1836 and the end of 1841. Nearly a third, 66 to be precise, purport to be English, and on this telling the tally of Hiberno-Norse coins (four—*recte* five) is somewhat higher than the normal proportion of Dublin coins to English in Scandinavian hoards of the period might have led one to suspect.

An analysis of the 1841 holdings of Anglo-Saxon coins is not without interest even to the Irish student, and makes it clear (*a*) that probably not all the coins then in the VE cabinet were registered before the catalogue's discontinuance, and (*b*) that those listed are likely to have derived from a number of parcels from different finds and not all from one particular, let alone identifiable, hoard. A listing by reigns, types, mints, and moneyers follows, and added (*a*) is the original catalogue number, (*b*) a letter to indicate the date when the entry was made, and (*c*) a + to indicate that a comparable piece still is to be found in the systematic collections of GF. The apparent total absence of Crux coins of Æthelræd II in itself should sufficiently indicate the artificiality of the original selection, but even so the further details are given in case a new generation of students one day may be able to marry up some of the more remarkable pieces with individual Gotland hoards from the critical quinquennium—Bror Emil Hildebrand records (*Anglosachsiska mynt*, 1st edn. (Stockholm, 1846), pp. liii–lxi) no fewer than eight significant hoards discovered on the island between 1836 and 1841.

The following is the alphabetical key to the dates of actual registration:

A	12 July 1836	D	5 July 1839
B	6 August 1837	E	3 August 1839
C	3 June 1839	F	20 December 1841

and the listing runs:

ÆTHELRÆD II			
First Hand		Helmet	
1. Chester, 'Leofstan' (<i>recte</i> Leomman?)	14 A	10. Cambridge, Cnit	183 F
2. London, 'Algar'	89 C +	11. Hereford, Ælewine	181 F
3. " Godwine	90 C	12. Huntingdon, Æthelstan	131 E +
4. " Leofstan (?Second Hand)	91 C ?	13. London, Eadmund	184 F
5. York, Alfstan (under Second Hand!)	132 E	14. York, Arnthur	182 F +
Second Hand		Last Small Cross	
6. Winchester (??), 'Andgrim'	133 E	15. Cricklade, Ælwine	170 F +
7. " Regenulf (? First Hand)	134 E	16. Exeter, Carla	172 F +
		17. Idem	173 F
Long Cross		18. Lewes, Ælfwerd	169 F +
8. Lincoln, Æthelnoth	128 E +	19. Norwich, Eadwacer	175 F +
9. Shaftesbury, Goda	129 E +	20. Shaftesbury, Ælfwine	176 F +
		21. Stamford, Æthelwold	168 F
		22. " Godwine	177 F +
		23. Idem	178 F +
		24. Thetford, Wælgisth (var. Hild. A.c.)	180 F
		25. Winchester, Alfswold	171 F
		26. " Siboda	130 E +
		27. York, Thorolf	179 F

CNUT

<i>Quatrefoil</i>				<i>Pointed Helmet</i>			
28. Cambridge, Ade	85	C		45. Chester, Leofwig	187	F	
29. „ Leofsig	201	F	+	46. Lincoln, Leodmæc	189	F	
30. „ Wulfsig	205	F	+	47. „ Leofwii	186	F	
31. Dover, Leofwine	200	F		48. „ Oslac	192	F	+
32. Hertford, Lifine	88	C		49. London, Leofstan	83	C	
33. „ Wulfric	204	F	+	50. „ Leofwold	84	C	
34. London, Ælfwold	206	F		51. „ Wynstan	193	F	
35. „ Elewine	87	C	+	52. <i>Idem</i>	194	F	
36. Lydford, Godric	198	F	+	53. <i>Idem</i>	195	F	
37. Shaftesbury, Ælric	197	F		54. Stamford, Leofwold	188	F	+
38. Shrewsbury, Grim	199	F	+	55. „ Morolf	190	F	
39. Wallingford, Eadwine	196	F		56. „ Morulf	191	F	+
40. Winchester, Godwine	208	F	+	57. Winchester, Godwine	185	F	+
41. York, Asgutr	86	C	+	58. York, Hildolf	82	C	+
42. „ Colgrim	202	F					
43. „ Ferthein	207	F		<i>Short Cross</i>			
44. „ Outhgrim	203	F	+	59. London, Goman	209	F	
				60. „ Leofwig	210	F	
				61. Stamford, Leofwine	211	F	
				62. York, Ræfen	212	F	

EDWARD THE CONFESSOR

<i>Radiate Small Cross</i>				<i>Small Flan</i>			
63. Lincoln, 'Hotsian'	17	B		65. Lincoln, Godwine	109	D	
64. <i>Idem</i> . A dittography?	110	D					

A sixty-sixth coin (no. 174 in the *Inregistreringsbok*—20 December 1841) proves to be Hiberno-Norse and is discussed below.

Four other coins registered on 20 December 1841 were rightly recognized as belonging to the 'Irish' (Hiberno-Norse) series. All were described as of Long Cross type, and may be presumed in consequence to belong to Phase I (cf. M. Dolley, *The Hiberno-Norse Coins in the British Museum* (London, 1966), pp. 119-27) with a date no later than the first decade of the eleventh century. Two (nos. 227 and 228 in the *Inregistreringsbok*—20 December 1841) have the Dublin mint-signature in an unequivocal form, and so may be equated with a run of unprovenanced coins in KMK (e.g. B. E. Hildebrand, *Anglosachsiska mynt*, 2nd edn. (Stockholm, 1881), nos. 34-55 and 19 respectively). A third (no. 229 in the *Inregistreringsbok*—again 20 December 1841) and likewise in Sihtric's name purports to have been struck in England by the Wilton moneyer Godwine, and so may be presumed to be a die-duplicate of BEH Sihtric 98—and of a coin now also in KMK *ex* the 1900 Mannegårda hoard from Lye parish on Gotland (SHM Inv. 11300; Hatz 359), if indeed it is not BEH Sihtric 98 itself. The fourth coin (no. 230 in the *Inregistreringsbok*—yet again 20 December 1841) appears to settle the matter quite conclusively. It is one of the rare pieces where the obverse legend begins not with Sihtric's name but + ðYMNROE+, while the reverse with its particular degeneration of the Dublin mint-signature remains to this day unique for the particular combination. There seems little room for doubt, then, that the coin is BEH Thymn 8, and in the most

satisfying manner the writer's friend Mr. Kenneth Jonsson of Stockholm has been able to turn up archival evidence in the Statens Historiska Museum that in 1879 KMK acquired from VE four Hiberno-Norse coins (SHM Inv. 6359) which can be shown to comprise BEH Sihtric 1, 90, and BEH Thymn 8. Admittedly BEH Sihtric 1 and 90 do not conform to the *Inregistreringsbok* descriptions, but this is very plausibly explained by the supposition of their acquisition by VE after 1841 and before 1879. As it happens, too, BEH 90 is another great rarity in the Hiberno-Norse series, and the picture seems clear enough. In 1879 the ageing Bror Emil Hildebrand, reverting to one of his first loves, was bringing together material for the definitive second edition (Stockholm, 1881) of his *Anglosachsiska mynt*, and it is easy to imagine how the venerable *riksantikvarie* and secretary of the *Vitterhets akademie* was able to use the weight of his authority to persuade a doubtless deferential school-board in Visby to make over, in the interests of completeness, coins lacking in the national collections—BEH Sihtric 1 is relatively common today only because of examples which have come to light since 1881. This still leaves us, of course, with *Inregistreringsbok* nos. 227 and 228, but one suspects that the second, at least, was the subject of an earlier and perhaps less formal exchange with KMK—the unprovenanced BEH Sihtric 19 is another *hapax* coin where the Stockholm cabinet is concerned, while a high proportion of the coins listed as BEH Sihtric 34–55 still to this day cannot be duplicated.

It is at this stage of the argument that account should perhaps be taken of the sixty-sixth of the coins reckoned as English by the 1841 cataloguer. The reverse legend was read by him (+)DLORNOLVNDRI, and it is described as of (Last) Small Cross type with, in theory, some sort of approximation to Æthelræd II's name and style. Nothing comparable is in the Visby cabinet today, but one suspects a duplicate of BEH Sihtric 83 *var.* in KMK which has the reverse legend +DGDOANOLVNDRIH, if it is not indeed the actual coin. The apparently too discrepant obverse legend of the Stockholm coin could be thought to militate against this, but frankly the competence of Dr. Enequist, as evidenced in the pages of the *Inregistreringsbok*, more than once leaves something to be desired. In fairness to his memory, nevertheless, one must recall that he was listing unfamiliar material at a period when the 1846 edition of *Anglosachsiska mynt* had still to appear. Nor should it be forgotten that he was very much an honorary curator of the school collections, and without neglecting his pedagogic and parochial charges he still found time to be a very fine amateur musician—one of his daughters, incidentally, became a professional singer under the name 'Biondini', settled in London as a music-teacher, and died there in 1899 (cf. E. Nyberg, *Gottländsk Släktbok*, Ekenäs (= Tammissaari), 1938, pp. 170 and 171). Regrettably, too, there cannot be found today the rough draft of the *Inregistreringsbok* seen by Steffen in the 1920s and apparently including provenances omitted from the fair copy. Further speculation is probably profitless, but what does seem certain is that not one of the five Hiberno-Norse pieces registered by Enequist in 1841 is in the Visby cabinet today. One hastens to add that the same holds good for perhaps half of the English coins recorded in the *Inregistreringsbok* begun in 1836, but in the case of these too there is not the least reason to suspect malfeasance. Down the years there has been a whole series of exchanges between VE and KMK, and the present strength of the Anglo-Saxon portion of the GF cabinet (cf. Appendix) should make it clear that

overall no advantage had been taken of the insular museum. It is just that the Hiberno-Norse element happens to have borne the brunt of the sacrifices, and it is only fair to add that until quite recently it was the Anglo-Saxon series which was prized academically, with the Dublin coins very much the poor relations. What one does very much regret, on the other hand, is that in so many cases individual hoard-provenances, or vital clues to the same, must have been lost, though even here patient archival research is doing much to redress the position. For example, in connection with the forthcoming *SCBI* fascicle devoted to the KMK's unrivalled collection of coins from the first part of the reign of Edward the Confessor, Mr. Kenneth Jonsson already has established VE provenances in respect of BEH Edw. Conf. 35, 51, 53, 61, 74, 177, 310, 412, 450, 598, 609, and 746, and work of this kind is only now beginning.

In the case of the present paper, all that now remains is to give details of the four Hiberno-Norse pennies in GF which have not been the subject of recent publication. Three (*a*, *b*, and *d*) are in the VE cabinet, and may be presumed to have been acquired by the school subsequently to 1841, and almost certainly before the beginning of this century. The fourth (*c*) was the sole Hiberno-Norse penny in one of the hoards first to be returned on long-term loan from KMK to GF, the 1920 discovery made at Österby in Othem parish (SHM Inv. 16450; GF C 1383; Hatz 160). Roughly 200 coins were involved, and there seems no record of any ornaments or of *hacksilver* accompanying the specie, nor indeed of any container. It seems, indeed, a hoard essentially of the same two-tier type as that from Liffride, though somewhat larger. Nearly a quarter of the coins (?) are Kufic, the latest apparently struck *c.* 1003, 3 are Byzantine *miliaresia* struck probably no later than the millennium, 39 German, of which 2 perhaps belong after 1024 though most of the others are substantially earlier, 1 Danish (*c.* 1015?), and 12 Scandinavian imitations (2 of them on square flans). The pattern presented by the 82 Anglo-Saxon pieces is as follows:

Second Hand	1	Last Small Cross	21
Crux	22	Quatrefoil	3
Long Cross	28	Pointed Helmet	5
Helmet	2		

so that the insular element at least may surely be thought to have been brought to the island no later than the third decade of the eleventh century.

Earliest of the four Hiberno-Norse coins is the unprovenanced penny of Sihtric Silkbeard's first coinage of Dublin [Fig. 1]. The prototype is one of the so-called



Fig. 1

Small Crux pennies of Æthelræd II, and so the imitation is unlikely to belong earlier than the summer of 997 (cf. M. Dolley, 'The Forms of the Proper Names Appearing on the Earliest Coins struck in Ireland', in F. Sandgren, ed., *Otium et Negotium*, Stockholm, 1973, pp. 49–65). It is from the same dies as two pennies listed there (p. 64, nos. 50a and 50b) as in the National Museum of Ireland (ex c. 1830 Clondalkin hoard) and the British Museum (ex R. C. Lockett sale). The weight is 1.47 g., and the die-axis 110°. Both the obverse and the reverse legends are largely unintelligible, but the obverse die is also known from coins with legends clearly incorporating the names of moneyers Fastulfr and Toki together with unequivocal Dublin mint-signatures. Omitted from the 1973 listing and only recognized as Hiberno-Norse in September 1976 and September 1977 respectively are two further coins from the same pair of dies in the University Museum at Lund and the University Coin Cabinet at Uppsala, and this means that the nine whole coins in Swedish collections and all presumptively found in Sweden include no fewer than one trio and two pairs of die-duplicates. The implications of this for the student are far reaching and will have to be discussed in another place. Here it is sufficient to note the likelihood that the coinage was one of very limited duration—just a few weeks in the summer of 997?—with the coins coming to Sweden on perhaps no more than one occasion. The rarity of the issue can be gauged, incidentally, from the circumstance that hardly any of the pieces are in private possession, while the total of those in public cabinets still does not extend beyond ninety.

The second of the systematic collection pennies in Visby is of Long Cross type, being also one of those which have the legend more or less faithfully copied from those of the English prototypes. It runs:

+ ÆDEL RÆÐRE + AICO

but the reverse reading:

+ FÆ | REMI | NM · O | DY FLI

is more than sufficient to give the coin to the Dublin series. The weight is 1.46 g. (22.5 gr.), and the die-axis 270°. A check against the coins in KMK in Stockholm reveals that the penny [Fig. 2] is a die-duplicate of BEH Ethelred 374 and of four other coins in that collection, at least two of them pieces found on Gotland. The obverse die, moreover, is one employed with quite another reverse to produce



Fig. 2

putative coins of Winchester, and the fact that one of these last occurred in the 1924 Igelösa hoard from Skåne (SHM Inv. 17532; Hatz 124) must suggest that all the coins of this grouping belong no later than 1005, and perhaps a little earlier.

The coin from the Österby find also is of Long Cross type, but here it is the obverse legend:

+SIHTRCRE+DYFLNI

which gives it to the Dublin series. The reverse legend:

+CIC|DFIN|EMIO|DEOR

apex one found on English pennies, and it was not until the beginning of this century that the Finnish numismatist Otto Alcenius (1838–1913) committed to paper, but not unfortunately to the printed page, a proper understanding of these pieces' place in the Hiberno-Norse series (cf. *Proc. Roy. Irish Acad.* 77 C 5 (1977), pp. 217–18). Comparison with coins in KMK reveals that the Österby coin (weight 1.33 g. or 20.5 gr., and die-axis 90°) [Fig. 3] is a die-duplicate of BEH Sihtric 1 and of half a dozen other coins in the same cabinet. In other words, the exchange of 1879 has come full circle, so that GF now possesses a replacement for one at least of the VE pieces so generously ceded to the great Swedish *riksantikvarie* in the interests of totality.



Fig. 3

The coin just described was presumably struck somewhere around the millenium. Chains of die-linking carry it into the Igelösa hoard which has a proportion of Hiberno-Norse coins that seem marginally later, and we may now turn to the third of the coins acquired by GF from VE in the early part of this century. It is one struck in the second half of the first decade of the eleventh century, and, as will be argued in another place, is a very close copy of an English penny of the so-called Helmet issue of Æthelræd II. Indeed, a die-duplicate in Stockholm (BEH Ethelred 672) was considered English by no less an authority than Bror Emil Hildebrand. It has been joined by a third specimen, also without hoard-provenance, and recent research has established that the same obverse die was used with three other reverses with variations of the same legend. Colgrim undoubtedly was a York moneyer in this type, but significantly the coins from this one obverse die do not link into his other pieces. Moreover, there are no die-links into the Scandinavian imitative series. The 'Irish'

traits of the obverse are particularly clear on the GF specimen which weighs 1.37 g. and has a die-axis of 300°, and the present consensus is that we are dealing with a particularly skilful copy done in Dublin c. 1010 of an English penny of a year or two earlier.

In conclusion, the writer would like to acknowledge generous grants from the British Academy and from the new Swedish numismatic foundation *Gunnar Ekströms Stiftelse* which made possible visits to Visby in September 1976 and in the same month of 1977. On both occasions he was received with the greatest possible courtesy at GF by *landsantikvarie fil. dr.* Gunnar Svahnström and by his wife *museiassistent* Karin Svahnström who put at his disposal not just the actual material but their unrivalled knowledge of the history of the collections, while another personal touch very deeply appreciated was the kindness of *antikvarie* Waldemar Falck and *amanuens* Ragnar Engeström of RAGU, the latter of whom gave up successive evenings to show him the actual findspots of a number of the Gotland hoards as well as a selection of the more notable antiquities of the north-west and north of the island.

APPENDIX

THE ANGLO-SAXON COINS IN GOTLANDS FORNSAL FROM THE FORMER VISBY HIGH SCHOOL COLLECTION

A total of 423 Anglo-Saxon silver pennies are registered as deriving from the former cabinet of Visby High School (VE). A few other pieces with the same provenance are now recognized as imitative, two being Hiberno-Norse (published *supra*) and the remainder Scandinavian. Of the authentic Anglo-Saxon coins, 274 were struck for Æthelræd II, 147 for Cnut, and one each for Harthacnut and Edward the Confessor. Eleven substantive types and three major varieties are represented, and the number of different mints stands at 51. To be remarked at once is the quite extraordinary imbalance of the collection. For example, the presence of the singleton Last Small Cross penny of London is even more curious than the total absence of Crux coins of York, and in this connection we do well to remember the *Inregistreringbok*'s apparent omission of Crux coins of whatever mint. The pattern of types and mints does suggest, however, that there may be a very simple explanation.

The suspicion of the writer is that at the end of the last century there may have been some plan to make the collection more representative of the later Anglo-Saxon coinage as a whole, and that to this end it was hoped to exchange coins on the face of it common for similar pieces from mints not yet represented in the VE trays. To this end, long runs of common coins, for example Crux coins of York—particularly apt because unregistered by Enequist—and Last Small Cross coins of London, were submitted to a potential benefactor, but for some reason the balance of the parcels was never retrieved. The arrangement may have been terminated by the death of one or other of the principals, or alternatively VE may have hoped that replacements for the common coins would be forthcoming from future hoards discovered on the island. One thing is certain. There has been no culling of the collection's rarities—too

	First Hand	Second Hand	Benediction Hand	Crux	Small Crux	Intermediate Small Cross	Long Cross	Helmet	Last Small Cross	Quatrefoil	Pointed Helmet	Short Cross	Arm-and-Sceptre	Trefoil-Quadrilateral
Barnstaple	—	—	—	2	—	—	—	—	—	—	—	—	—	2
Bath	—	—	—	—	—	—	2	1	—	2	1	—	—	6
Bedford	—	—	—	—	—	—	2	—	—	—	—	—	—	2
Cambridge	—	—	—	2	—	—	1	2	—	2	—	—	—	7
Canterbury	1	—	—	2	1	—	2	—	2	—	—	1	1	10
Chester	—	—	—	1	—	—	3	1	3	3	2	—	—	13
Chichester	—	—	—	—	—	—	2	—	—	—	—	—	—	2
Cissbury	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Colchester	—	—	—	3	—	—	1	—	1	1	—	1	—	7
Cricklade	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Dorchester	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Dover	—	1	—	—	—	—	2	2	—	1	—	2	—	8
Exeter	2	1	—	2	—	—	8	1	3	1	—	—	—	10
Gloucester	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Guildford	—	—	—	—	—	—	1	—	—	—	—	1	—	2
Hastings	—	—	—	—	—	—	1	—	—	1	1	—	—	3
Hereford	—	—	—	1	—	—	2	—	—	—	—	—	—	3
Hertford	—	—	—	2	—	—	—	—	—	1	—	—	—	3
Huntingdon	—	—	—	1	—	—	1	2	—	—	—	—	—	4
Ilchester	—	—	—	1	—	—	—	—	—	2	—	—	—	3
Ipswich	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Leicester	—	—	—	—	—	—	2	—	—	—	—	1	—	3
Lewes	—	—	—	4	—	—	6	—	2	—	—	—	—	12
Lincoln	—	—	—	4	—	—	8	2	3	5	7	5	—	34
London	5	2	—	9	1	—	17	9	1	14	23	11	—	92
Lydford	—	—	—	2	—	—	1	—	—	1	—	—	—	4
Maldon	—	—	—	1	—	—	—	—	—	1	—	—	—	2
Northampton	—	—	—	—	—	—	3	—	—	—	1	1	—	5
Norwich	—	1	—	1	—	—	3	—	1	1	1	—	—	8
Nottingham	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Oxford	—	—	—	—	—	—	4	1	1	2	—	—	—	8
Rochester	—	—	1	—	1	—	2	—	—	—	—	—	—	4
Salisbury	—	—	—	—	—	—	—	—	—	—	2	—	—	2
Shaftesbury	—	—	—	1	—	—	2	—	1	—	—	1	—	5
Shrewsbury	—	—	—	—	—	—	2	—	—	2	—	—	—	4
Southwark	—	—	—	6	—	—	—	—	—	3	—	—	—	9
Stafford	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Stamford	—	—	—	2	—	—	3	2	4	5	4	1	—	22
Steyning	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Tamworth	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Taunton	—	—	—	—	—	—	—	—	1	1	—	—	—	2
Thetford	—	—	—	3	—	—	3	—	3	—	1	5	—	15
Totnes	2	—	—	2	—	—	—	—	1	—	—	—	—	5
Wallingford	—	—	—	1	—	—	1	—	—	—	—	—	—	2
Wareham	—	—	—	1	—	—	1	—	—	—	—	—	—	2
Warwick	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Watchet	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Wilton	—	—	—	2	—	1	2	—	—	—	1	—	—	6
Winchester	—	—	—	18	—	—	8	2	7	2	2	—	—	39
Worcester	—	—	—	—	—	—	2	—	1	—	—	—	—	3
York	—	—	—	—	—	—	8	3	4	6	4	6	—	31
	10	5	1	75	3	1	110	28	41	60	48	39	1	423

many of the pieces left in the trays would have been prime targets for any criminally disposed visitor—or curator—of the post-Enequist era. One hastens to add, too, that there seems no possibility that the pattern of the collection has been distorted by its absorption of any atypical and undigested find such as the 1851 hoard from Valldarve in Eskelhem parish (SHM Inv. 1712; Hatz 190). The folded papers that still enclose a number of the VE coins show that it was put together piecemeal with gifts from a range of disparate sources—for example, it has already been possible to associate a handful of the coins with the 1893 Myrände find from Atlingbo parish (SHM Inv. 9392/3; Hatz 209; *CNS* 1.1, 19), while other coins seem certainly to belong to the years immediately following the discontinuance of the *Inregistreringsbok*. This is work to be done that is, of its nature, time-consuming, but pending the definitive recovery of individual provenances English students may find it useful to have a summary listing with metric weights of the 423 Anglo-Saxon pieces by mints, reigns, types, and moneyers, in the ordering of the British Museum trays:

BARNSTAPLE

Æthelræd II Crux: Ælfsige 1-66, 1-59.

BATH

Æthelræd II Long Cross: Edstan 1-79, Wynstan 1-74. Helmet: Æthelric 1-46.

Cnut Quatrefoil: Ælfwald 1-16, Æthestan 1-16. Pointed Helmet: Ælfric 1-12.

BEDFORD

Æthelræd II Long Cross: Gunni 1-70, Leofnoth 1-72.

CAMBRIDGE

Æthelræd II Crux: Edric 1-25, Eadwine 1-22. Long Cross: Godric 1-73. Helmet: Leofsige 1-49, Wulfsige 1-22.

Cnut Quatrefoil: Leofsig 0-92, Wulfsi 1-00.

CANTERBURY

Æthelræd II First Hand: Boia 1-35. Crux: Duda 1-66, Leofric 1-65. Small Crux: Leofsan 1-41. Long Cross: Ælfred 1-66, Leofstan 1-59. Last Small Cross: Godman 1-43, Leofstan 1-38.

Cnut Short Cross: Winedæi 1-09.

Harthacnut Arm-and-Sceptre: Godsunu 0-96.

CHESTER

Æthelræd II Crux: Eadric 1-72. Long Cross: Ælewine 1-71, Othulf 1-63, 1-59, Swegen 1-63. Helmet: Leofnoth 1-39. Last Small Cross: Ælfstan 1-70, Leofnoth 1-57, Leofwine 1-21.

Cnut Quatrefoil: Croc 1-11, Godwine 1-06, Wulsi 1-06. Pointed Helmet: Ælfsige 1-05, Leofnoth 1-04.

CHICHESTER

Æthelræd II Long Cross: Ælfwine 1-69, Æthestan 1-71.

CISSBURY

Æthelræd II Last Small Cross: Ciolnoth 1-84.

COLCHESTER

Æthelræd II Crux: Swetinc 1-42, Wulfnoth 1-34, Wulfwine 1-45. Long Cross: Leofwold 1-22. Last Small Cross: Godric 1-37.

Cnut Quatrefoil: Ælfwine 1-08. Short Cross: Godric 1-10.

CRICKLADE

Æthelræd II Last Small Cross: Ælwine 1-42.

DORCHESTER

Æthelræd II Crux: Wulfnoth 1-27.

DOVER

Æthelræd II Second Hand: Osferth 1-13. Long Cross: Godwine 1-60, Leofhyse 1-51. Helmet: Cynsige 1-29, Mannine 1-29.

Cnut Quatrefoil: Eadwine. Short Cross: Boga 1-12, Leofwine 1-14.

EXETER

Æthelræd II First Hand: Godwine 1-20, Luda 1-46. Second Hand: Leofric 1-15. Crux: Edric 1-55, Tuna 1-45. Long Cross: Ælfnoth 1-69, Byrhtic 1-40, Dunstan 1-42, God 1-66, Godric 1-76, Manna 1-38, Wulfsige 1-71, Wunsige 1-71. Helmet: Wulfstan, 1-42. Last Small Cross: Carla 1-44, Isegod 1-17, 1-07.

Cnut Quatrefoil: Isegod 1-06.

GLOUCESTER

Cnut Quatrefoil: Leofsige 1-13.

GUILDFORD

Æthelræd II Long Cross: Duncild 1-70.

Cnut Short Cross: Blacamon 0-93.

HASTINGS

Æthelræd II Long Cross: Leva 1-70.

Cnut Quatrefoil: Elfweard 0-99. Pointed Helmet: Etsige 0-91.

HEREFORD

Æthelræd II Crux: Leofgar 1-69. Long Cross: Æthelwi 1-45, Byrhtstan 1-54.

HERTFORD

Æthelræd II Crux: Æthelwerd 1-57, Wulfic 1-20.

Cnut Quatrefoil: Wulfic 1-29.

HUNTINGDON

Æthelræd II Crux: Ælfic 1-67. Long Cross: Ælfic 1-57. Helmet: Ælfstan 1-27, Æthelstan 1-43.

LICHESTER

Æthelræd II Crux: Leofric 1-65.

Cnut Quatrefoil: Oswi 0-95, Wulfelm 1-02.

IPSWICH

Cnut Quatrefoil: Leofric 1-22.

LEICESTER

Æthelræd II Long Cross: Ælfic 1-67, Thurulf 1-61.

Cnut Short Cross: Wulnoth 1-13.

LEWES

Æthelræd II Crux: Leofnoth 1-68, 1-48, 1-43, Leofwine 1-55. Long Cross: Ælfgar 1-58, Godefrith 1-51, Herebyrht 1-69, 1-48, Merewine 1-70, 1-67. Last Small Cross: Ælfwerd 1-37, Liofwine 1-21.

LINCOLN

Æthelræd II Crux: Garfin 1-41, Stignbit 1-43, Theodgeld 1-49, Ulf 1-52. Long Cross: Æthelnoth 1-71, 1-18, Colgrim 1-63, Dreng 1-73, 1-58, Grim 1-73, Osgut 1-73, Wulfic 1-57. Helmet: Æthelnoth 1-47, Osferth 1-12. Last Small Cross: Othgrim 1-40, Sumerleth 1-43, Wulfbern 1-13.

Cnut Quatrefoil: Iustan 1-29, Matethan 0-93, Osferth 0-84, Osgut 1-11, Wulfgat 1-14. Pointed Helmet: Aslac, etc. 1-16, 1-08, Godric 0-78, Iustan, etc. 1-16, 1-14, Leofing, 1-03, Swartebrand 1-19. Short Cross: Godric 1-18, Godwine 1-14, Oslac 1-16, Wadlos 1-09, Wulfic 1-17.

LONDON

- Æthelræd II First Hand: Ælfgar 1-58, Ælfwold 1-58, Æthered 1-09, Cynsige 1-55, Osulf 1-55. Second Hand: Leofstan 1-23, Wulfmæc 1-36. Crux: Ælfnoth 1-57, Ælfwerd 1-56, Ceolnoth 1-30, Deorsige 1-48, Edwine 1-59, Eadwold 1-49, Goldwine 1-33, Lifinc 1-60, Osecytel 1-61. Small Crux: Drhwold 1-34. Long Cross: Ælfric 1-65, Ælfryd 1-49, Æthelwerd 1-65, 1-39, Brihtlaf 1-58, Brunstan 1-56, Eadwine 1-56, Eadwold 1-41, Godman 1-57, Godwine 1-42, Heawulf 1-40, Leofric 1-56, 1-46, Leofwine 1-68, Lyfinc 1-63, Osulf 1-59, Sibwine 1-67. Helmet: Æthelwerd 1-35, Eadwold 1-41, Goda 1-46, Godric 1-46, Leofwine 1-44, Leofwold 1-45, 1-41, Swetinc 1-48, 1-38, Last Small Cross: Æadwine 1-29.
- Cnut Quatrefoil: Ælfwine 1-43, 1-01, Æthelwine 1-15, Borstig 1-36, Eadwold, etc. 1-09, 1-05, Ealdred 1-13, Godere 1-42, Leofsig 1-10, Leofstai 1-15, Liofwine 1-11, Osulf 1-04, Swetinc 1-14, Wulfwine 1-05. Pointed Helmet: Ælfgar 1-08, 1-05, Ælfric 1-02, 1-01, Ælwerd 1-06, Elfwig 0-95, Elewine 1-13, Bruninc 1-06, Edric 0-95, Etsige 1-03, 1-01 (2), Edwerd 1-11, Edwine 0-89, Godwine 1-05, Lifinc 1-08, Leofric 0-96, Leofstan 1-03, 1-01, Leofwold 1-06, Thorcetl 1-00, Wulfric 0-95, Wynsige 0-99. Short Cross: Ælfwig 0-89, Brihtmæc 1-08, Brunman 0-96, Edmund 1-00, Edwerd 1-17, Eadwold 1-15, God 1-03, Godric 1-02, Leofwold 1-16, 1-00, Swan 1-12.

LYDFORD

- Æthelræd II Crux: Goda 1-23, Godwine 1-54. Long Cross: Ælfstan 1-63.
- Cnut Quatrefoil: Godric 0-97.

MALDON

- Æthelræd II Crux: Ælfwine 1-46.
- Cnut Quatrefoil: Ælwine 0-76.

NORTHAMPTON

- Æthelræd II Long Cross: Æthelnoth 1-84, Bruninc 1-69, Leofwine 1-56.
- Cnut Pointed Helmet: Leofwine 1-13. Short Cross: Leofwine 1-14.

NORWICH

- Æthelræd II Second Hand: Brantinc 1-43. Crux: Eadmund 1-43. Long Cross: Ælfric 1-71, Hwateman 1-28, Swertinc 1-44. Last Small Cross: Eadwac 1-27.
- Cnut Quatrefoil: Eadmund 1-09. Pointed Helmet: Manna 1-05.

NOTTINGHAM

- Cnut Quatrefoil: Oswold 1-04.

OXFORD

- Æthelræd II Long Cross: Ælfmæc 1, Æthelwine 1-63, Godinc 1-68, Wulfwine 1-66. Helmet: Coleman 1-46. Last Small Cross: Brihtwine 1-69.
- Cnut Quatrefoil: Coleman 1-11, Sæwine 1-14.

ROCHESTER

- Æthelræd II Benediction Hand: Sidwine 1-70. Small Crux: Eadsige 1-33. Long Cross: Eadwerd 1-68, Edwine wnr.

SALISBURY

- Cnut Short Cross: Godwine 1-10, 1-04.

SHAFTESBURY

- Æthelræd II Crux: Goda 1-63. Long Cross: Goda 1-48, Lufa 1-72, Last Small Cross: Ælfwine 1-27.
- Cnut Short Cross: Ælric 1-08.

SHREWSBURY

- Æthelræd II Long Cross: Ælfheh 1-74, Oswold 1-79.
- Cnut Quatrefoil: Grim 1-29—var. with sceptre, Etsige 1-08.

SOUTHWARK

Æthelræd II Crux: Ælfric 1-03, Æthelwerd 1-40, Byrhtlaf 1-45, Byrhtic 1-31, Godric 1-47, Tuneman 1-49.
 Cnut Quatrefoil: Ælfwine 1-23, Wulfic 0-97, Wulfstan 1-57.

STAFFORD

Æthelræd II Long Cross: Ægenulf 1-74.

STAMFORD

Æthelræd II Crux: Alfwold 1-37, Cristhin 1-26. Long Cross: Godæg 1-29, Godeleof 1-74, Swertgar 1-65. Helmet: Æscwig 1-45, Escea 1-35. Last Small Cross: Æthelwine 1-20, Godæg 1-07, Godwine 1-20, 1-17.
 Cnut Quatrefoil: Æscman 1-08, Brunstan 0-96, Godeleof 0-91, Godric 0-96, 0-93. Pointed Helmet: Leofric 0-96, Leofwold 1-02, Morulf 1-08, Thurulf 0-97. Short Cross: Oswald 0-96.
 Edw. Conf. Trefoil Quadrilateral: Leofwine 0-96.

STEYNING

Cnut Short Cross: Frthiwine 1-08.

TAMWORTH

Æthelræd II Long Cross: Ælfgar 1-58.

TAUNTON

Æthelræd II Last Small Cross: Eadric 1-18.
 Cnut Quatrefoil: Eadric 1-11.

THETFORD

Æthelræd II Crux: Folcard 1-58, Leofwine 1-41, Swyrlinc 1-66. Long Cross: Grim 1-73, Man(n)a 1-74, 1-69. Last Small Cross: Edwine 1-22, Leofric 1-24, Wælgist 1-20.
 Cnut Pointed Helmet: Brunstan 1-15. Short Cross: Ælfwi(n)e 1-15, 1-09, Alfwold 1-11, Wineman 1-17, 1-10.

TOTNES

Æthelræd II First Hand: Manna 1-37, 1-32. Crux: Ælfstan 1-38, Doda 1-66. Last Small Cross: Huneman 1-00.

WALLINGFORD

Æthelræd II Crux: Leofric 1-67. Long Cross: Mann 1-70.

WAREHAM

Æthelræd II Crux: Ælfgar 1-46. Long Cross: Wulfic 1-76.

WARWICK

Æthelræd II Long Cross: Byrhsige 1-72.

WATCHET

Æthelræd II Long Cross: Hunewine 1-75.

WILTON

Æthelræd II Crux: Leofwine 1-61, Wulfgar 1-67. Intermediate Small Cross: Sæwine 1-70. Long Cross: Leofwine 1-75, Sæwine 1-71.
 Cnut Pointed Helmet: Ælstan 1-25.

WINCHESTER

Æthelræd II Crux: Ælfsige 1-72, 1-67, Alfwold 1-30, Æthelgar 1-67, Æthestan 1-69, 1-68, Berhtnoth 1-71, 1-60, Byrhsige 1-70, 1-69, 1-65, 1-50, Byrhtmær 1-65, Eadnoth 1-58, Leofwold 1-67, 1-63, Wynstan 1-67, Wy—(frag.). Long Cross: Ælfsige 1-68, Æthelgar 1-70, Byrhtnoth 1-75, Byrhtwold 1-77, Godeman 1-74, 1-71, 1-67, Godwine 1-74. Helmet: Godman 1-32, Spileman 1-36. Last Small Cross: Ælfsige 1-23, 1-20, Brhtic 1-22, Oda 1-10, Ordbriht 1-31, Siboda 1-21, Wulfnoth 1-34.
 Cnut Quatrefoil: Ælfwine 1-16, Oda 1-00. Pointed Helmet: Ælfstan 1-06, Godwine 1-14.

WORCESTER

Æthelræd II Long Cross: Æthelmær 1·69, Wulfric 1·70. Last Small Cross: Godiwne 1·55.

YORK

Æthelræd II Long Cross: Eadric 1·65, Frostulf 1·71, Hundulf 1·71, Leofstan 1·70, 1·67, Oban 1·65, 1·36, Othgrim 1·62. Helmet: Arnthur 1·40, Hildulf 1·38, Outhgrim 1·14. Last Small Cross: Hildolf 1·71, 1·39, Osgot 1·66, Thorstan 1·39.

Cnut

Quatrefoil: Asgutr 0·89, Bretecol 1·02, Frithcol 0·89, Outhgrim 0·99, Stircol 1·03, Swertine 1·21. Pointed Helmet: Fargrim 0·99, Hildolf 1·04, Sunulf 0·92, Withrin 1·00. Short Cross: Crucan 1·15, Fæthein 1·14, Hildulf 1·08, Osgod 1·09, Ucede 1·11, Wulnoth 1·09.

HISTORICAL IMPLICATIONS OF THE REGIONAL PRODUCTION OF DIES UNDER ÆTHELRED II¹

PAULINE STAFFORD

THE study of Anglo-Saxon numismatics has advanced considerably over the past two decades, and the picture which is emerging, although not yet definitive, must interest historians. An interim marriage between the historical and numismatic evidence, especially for the reign of Æthelred II, reveals the connections which existed between the coinage and political factors. Certain political developments during this reign had repercussions on the coinage, and the advancing study of regional die-production has sometimes made it possible to link specific changes in the circumstances of local rule with changes in the coinage.

England in the tenth and eleventh centuries was not a centralized state. The effectiveness of royal government depended on relations between the king and those who ruled in his name, the ealdormen, bishops, and reeves. In certain areas such as northern England the problems of government were almost always acute. The politics of late Anglo-Saxon England are dominated by such problems and relationships, and inevitably they varied with the position, power, and loyalty of individual nobles as well as with the king's own ability and situation. The heyday of King Edgar's power in the 970s, for example, differs significantly from the early stages of Æthelred's reign during the 980s, when a new and youthful king was establishing himself on the throne, and from the last years of that same reign when the English kingdom was facing sustained external attack of an unprecedented ferocity. It is not surprising to find that the coinage reflects such changes.

General links between the coinage and other areas of royal administration might be expected. The map of mints after Edgar's reform, for example,² shows that the area of controlled currency in eleventh-century England was similar to the area of royal authority represented by Domesday Book. York in each case was the most northerly extension. The concentration of mints in central Wessex, far more than necessary as Dr. Metcalf has pointed out,³ may be partly because this is the area of greatest royal authority and activity where the royal demesne was concentrated.⁴

¹ This paper was delivered at a meeting on the B.N.S. and benefited from the comment and discussion of members of that Society. I owe an especial debt of gratitude to Mark Blackburn and Stewart Lyon who read the paper in draft, made many criticisms, and gave unstintingly of their own unpublished work and ideas. Above all, my thanks are due to Professor Dolley, who first interested me in numismatics, who has encouraged that interest with much help over the years, who suggested that I write this paper, and who has inspired it at every stage. My debt to him is even greater than the references

would suggest. Those mistakes which remain are entirely my own.

² R. H. M. Dolley and D. M. Metcalf, 'The Reform of the Coinage under Edgar', *Anglo-Saxon Coins*, ed. R. H. M. Dolley (London, 1961), p. 151.

³ D. M. Metcalf, 'Geographical Patterns of Minting in Medieval England', *Seaby's Coin and Medal Bulletin*, 1977, pp. 314-17, 353-7, and 390-1 esp. p. 391.

⁴ See my paper, 'The Reign of Æthelred II, A Study in the Limitations on Royal Policy and Action', in *Æthelred Millennium*, ed. D. Hill.

Many mints may have administrative as much as economic significance, as in the case of Winchcombe, a shire town and a mint, but with an output of coin so small as to suggest that it was never economically important.⁵ Kings looked to the coinage for profit, and Anglo-Saxon administration was at its most sophisticated in enforcing and maximizing royal dues and rights.⁶ The manipulation of the coinage was a regular and barely disguised tax on the use of money made possible and profitable by the king's establishment of a monopoly over minting. Recent work on metrology has revealed weight variations not only from issue to issue but within issues from area to area.⁷ Metcalf correlates these variations with the functions of points of bullion entry.⁸ The use of coin in administration and changing royal needs may also be important. In many issues, for example, Winchester, the West Saxon, and often the West Mercian mints strike heavy, whereas eastern and especially Danelaw mints strike light coin.⁹ Winchester, in particular, and Wessex, in general, were centres for the payment of the bulk of royal dues to be taken perhaps in heavy coin. The lower reaches of the Severn and parts of the Welsh marches also had significant concentrations of royal land. One reason for the difference between heavy and light coin might be a variable minting fee, light coins representing a heavy tax on the use of coin.¹⁰ If such a tax were a royal motive in the manipulation of the coinage its preponderance in the major trading centres of eastern England might be expected, and the consistently light weight of the coin from c. A.D. 1012 to c. A.D. 1051 may represent a particularly heavy tax to meet the heavy drain on royal finances in the shape of the heregeld.¹¹

Royal interest in the coinage is not to be measured simply in terms of profit. The coinage contributed to royal prestige and propaganda.¹² Some of Alfred's issues had political purposes.¹³ Athelstan's experiments with portrait issues and royal titles¹⁴ have definite political overtones. Edgar's great reform of the coinage itself was part of a propaganda exercise in 973. Professor Dolley associates it with the second quasi-imperial consecration and the ritual rowing on the Dee—a carefully stage-managed

⁵ On Winchcombe output see I. Stewart, 'Reflections on Some Wessex Mints and Their Moneyers', *NC* xv (1975), 219–29 esp. p. 228, and *Sylloge of Coins of the British Isles*, vol. 19, 'Bristol and Gloucester Museums', pp. 105–9.

⁶ See J. Campbell, 'Some Observations on English Government from the Tenth- to the Twelfth-Century', *TRHS* xxv (1975), 39–54, and cf. S. Harvey, 'Royal Revenue and Domesday Terminology', *EcHR*, ser. 2, ii (1967), 221ff. and 'Domesday Book and its Predecessors', *EHR* lxxxvi (1971), 753–73.

⁷ V. J. Butler, 'The Metrology of the Late Anglo-Saxon Penny, the Reigns of Æthelred II and Cnut', *Anglo-Saxon Coins*, pp. 195–214; C. S. S. Lyon, 'Variations in Currency in Late Anglo-Saxon England', *Mints, Dies and Currency*, Essays in Memory of Albert Baldwin, ed. R. A. G. Carson (London, 1971), pp. 101–20; K. Jonsson, 'An Example of Regional Weight Variation in the Coinage of Æthelred II', *NC* (1977), 177–80.

⁸ D. M. Metcalf, 'The Ranking of Boroughs, Numismatic Evidence for the Reign of Æthelred II', *Æthelred Millennium*, ed. D. Hill.

⁹ See the remarks of Butler, 'The Metrology . . .', on First Small Cross, Crux, Long Cross, and Helmet. Cf. H. B. A. Petersson, *Anglo-Saxon Currency: King Edgar's Reform to the Norman Conquest* (Lund, 1969), pp. 146–54. Petersson argued that weight variations arise as a result of averaging outputs, so that mints which struck throughout an issue and so struck more of the later and lighter coins, would record a lower average. Jonsson's evidence for the simultaneous striking of coin of different weight rebuts this argument.

¹⁰ C. S. S. Lyon, 'Some Problems in Interpreting Anglo-Saxon Coinage', *Anglo-Saxon England*, v (Cambridge, 1976), 207.

¹¹ Cf. Lyon's remarks in 'Variations . . .', pp. 114–15.

¹² Fully appreciated by Metcalf, *SCMB*, 1977, p. 315.

¹³ R. H. M. Dolley and C. Blunt, 'The Coinage of Alfred', *Anglo-Saxon Coins*, pp. 77–95, and Lyon, 'Some Problems . . .', pp. 181–9.

¹⁴ See C. Blunt, 'The Coinage of Athelstan, King of England 924–39', *BNJ* xlii 35–159, esp. pp. 46–59.

piece of political theatre.¹⁵ The impresarios of these events were the ecclesiastical leaders of the monastic reform movement. English churchmen in the late tenth century were conversant with many aspects of the ninth-century Carolingian monarchy,¹⁶ and Carolingian ideas influenced the events of 973. The use of the coinage by Carolingian rulers for prestigious purposes was probably not far from the minds of Edgar's ecclesiastical advisers.¹⁷ These same churchmen were conscious of the achievements of the native dynasty,¹⁸ and the reform of 973 may be a revival of ideas from the reigns of Athelstan, Alfred, and even Æthelwulf. The coinage is part of the image of kingship and the image which English churchmen of this date were fostering was that of the holy king.¹⁹ For forty years after 973 the iconography of the English coinage was overwhelmingly religious. On the coin which represented the king's authority throughout England, the portrait of the ruler was associated with symbols of the divine.

At least as early as the reign of Athelstan, political factors affected not only the general but the detailed administration of the coinage. Athelstan's coinage responded to the changing circumstances of local rule. There were at least two significant experiments with the organization of the coinage under Athelstan: the Cross type with the title *Rex totius Britanniae* and regular mint-signatures which seems to have replaced the Two Line type in certain areas; and the Crowned Bust type, again with mint-signature but with a much narrower geographical spread than the Cross type. Crowned Bust is confined to the southern group of mints, to East Anglia, and perhaps very late in the reign to York.²⁰ Whatever Athelstan's intentions for this type, it only succeeded in the strongest areas of royal power, that is in the south of England and East Anglia. The East Anglian mints spring into life during Crowned Bust with a very high quality of workmanship, high weight, and rigidly enforced mint-signatures. Little is known of how East Anglia was controlled between Edward the Elder's conquest and the early years of Athelstan's reign. But in 932 Athelstan Half King, a West Saxon nobleman whose family had extensive lands in the south, was appointed as ealdorman.²¹ His family was to control East Anglia loyally in the name of the kings of Wessex for the next sixty years. The West Saxon provenance of this family and its loyalty makes it likely that this appointment was the occasion from which the Norwich mint began to strike a rigidly controlled southern type, i.e. Crowned Bust, which ought therefore to date, as Blunt suggested on other grounds, from c. A.D. 932. Both the moneyers and the type continue at Norwich into the reign of Edmund, matching the continuity of the family itself. York presented a very different problem to the kings of Wessex, and Athelstan's York coinage suggests a recognition of the difficulties encountered in ruling this area.²² The archiepiscopal

¹⁵ Dolley and Metcalf, *op. cit.*, esp. pp. 136 and 152, and Dolley's forthcoming paper 'The Date of Edgar's Reform'.

¹⁶ For general corroboration of this awareness see J. Campbell, 'Some Observations on English Government ...', pp. 193-4.

¹⁷ Professor Dolley informs me that he is about to publish a paper arguing for cyclical recoinages under Æthelwulf dating from that king's return from the Carolingian court. Cf. Lyon, 'Some Problems ...', pp. 193-4.

¹⁸ See, e.g., Ælfrie's remarks on Alfred and Athelstan in his translation of the Homily on Judges in the Old English Heptateuch. Dolley and Metcalf, *op. cit.*, p. 156, saw 973 as a deliberate harking back.

¹⁹ See, e.g., R. Deshmann, 'Christus Rex et magi reges. Kingship and Christology in Ottonian and Anglo-Saxon Art', *Frühmittelalterliche Studien*, viii (1976), 367-405.

²⁰ Blunt, *op. cit.*, p. 46.

²¹ C. Hart, 'The Family of Athelstan Half King', *Anglo-Saxon England*, ii (Cambridge, 1973), 115-44.

²² Blunt, *op. cit.*, pp. 88-92.

minting privileges were allowed to continue, at first totally separate from the royal mint and later through the archbishop's participation in that mint. The loyalty of Archbishops of York, even as late as the mid tenth century, could not be taken for granted and the king would not lightly risk alienating their support. Under Athelstan the royal mint at York was controlled by a single moneyer, first Rægnald, and then Æthelferth who continued into the reign of Anlaf Guthfrithson; in each case a single monopolist who must have had many workmen under him. Such a powerful and presumably profitable monopoly may well have been the only way of ensuring royal control of the coinage in a city where the power of the West Saxon kings was much resented. Under Anlaf Sihtricson and Edmund York is once again a multi-moneyer mint. In East Anglia and at York under Athelstan the coinage and its organization responded to differing political pressures.

Detailed study of the tenth-century coinage has been concentrated on the reform of King Edgar and the immediately succeeding period where the evidence is particularly plentiful.²³ Edgar's reform involved cyclical recoinages, the setting-up or reopening of a large number of mints to facilitate these recoinages, and the addition of the name of the mint to that of the moneyer on the coin to aid in the detection of those who failed to comply. Three particular lines of inquiry in the post-reform period show how the coinage responded to political changes: the minting pattern, the movement of moneyers, and local die-cutting.

The great burgeoning of mints in the late tenth and early eleventh centuries went far beyond economic necessity, and in central Wessex far beyond the principle of a mint accessible to the whole population.²⁴ Edgar's reform could have worked with fewer mints. The exact minting pattern after 973 cannot be certainly drawn especially since finds of Reform-type pennies are still few, and the same vagaries of coin hoards make it difficult to be certain how that pattern changed over the next forty years or so. But it does seem, on present evidence, that many so-called mints functioned only intermittently and for specific purposes, and that the minting pattern continued to change for some time after 973. Many of the very small and ephemeral mints of Wessex appear only very briefly during Æthelred's reign: Warminster, Crewkerne, Axbridge, Bruton, Taunton, and Milborne Port appear in Long Cross, and only Warminster and Taunton strike any other Æthelred issue, Last Small Cross in each case. Some of these West Saxon mints do not function until even later, as in the case of Petherton, Bedwyn, and Berkeley. Many of these mints must have lain dormant for years.²⁵ In most of these cases when the mint did strike it tended to be with the help of a moneyer from some adjacent and larger mint.²⁶ Such a pattern of activity

²³ Dolley and Metcalf, 'The Reform ...', is still the essential starting-point. Much work since this is surveyed by Lyon, 'Some Problems ...'.

²⁴ Metcalf, *SCMB* 1977.

²⁵ Lyon, 'Some Problems ...', p. 210; Metcalf, *supra*; and cf. I. Stewart, 'Reflections on Some Wessex Mints ...', *NC* xv. I am grateful to S. Lyon for additional information on this point.

²⁶ All information on moneyers unless otherwise stated is derived from O. von Feilitzen and C. Blunt, 'Personal Names on the Coinage of King Edgar', *England Before the Conquest*, ed. P. Clemoes and K. Hughes

(Cambridge, 1971), pp. 183-214; V. J. Smart, 'Moneyers of the Late Anglo-Saxon Coinage, 973-1016', *Commentationes de Nummis Saeculorum IX-XI in Suecia Repertis*, pt. II, ed. N. L. Rasmussen and B. Malmgren (Stockholm, 1968), pp. 191-276. On Milborne Port see Dolley, *BNJ* xxix (1958-9), 61-4, its Long Cross moneyer Æthelric is a prolific Shaftesbury moneyer, and one of its Pointed Helmet moneyers Swetric is known at Winchester. Cf. F. Elmore-Jones, 'The Mint of Axbridge', *BNJ* xxx (1960-1), 61-9. For Berkeley see *SCBI* xix, 109-11.

has been remarked in certain south-western mints such as Castle Gotha.²⁷ Mints such as Aylesbury and Hertford rarely had a moneyer permanently attached to them, but were usually supplied as needed from a large mint, often London.²⁸ Such facts must raise the question of whether every place whose name appears on a coin was a permanent mint; whether many of them were economically unnecessary and opened only occasionally and for specific purposes.²⁹ A large number of such mints are concentrated in Wessex, and many are on great royal estates such as Petherton, Bedwyn, Milborne Port, Bruton, Berkeley. These estates were centres for the collection of royal dues and their renders may still normally have been taken in kind in the eleventh century.³⁰ At times of exceptional royal need for cash or of royal absence, these renders may have been made in cash, and fluctuating mint output may result in part from fluctuating royal need. The fluctuations in the activity of many mints and the creation and movement of mints demonstrate that the minting pattern of the 970s was subjected to unforeseen strains and demands which necessitated flexibility. This fact is clearest in the response of the coinage to the payment of gelds under Æthelred, which has been shown to have had a significant impact on minting.³¹ The emergency measures resulting from Viking attack show similar flexibility, as when the new mint was opened at Salisbury in 1003 as a refuge for the moneyers of Wilton among others.³² There may have been many other temporary factors, such as the presence of the royal court in an area, which could affect a minting pattern which in many of its details, if not its broad outlines, was not simply a product of the logic of economics.

Moneyers could be, and often were, moved from mint to mint. The most obvious examples are the movement of moneyers to the emergency mints such as Salisbury and Cissbury, and the interchange of moneyers between adjacent mints such as Southampton and Winchester,³³ London and Southwark.³⁴ Moneyers could move within a given area, often frequently, as the Exeter moneyers did in the south-west³⁵ and the Canterbury moneyers did in south-east England.³⁶ Lincoln moneyers

²⁷ Stewart, 'Reflections on Some Wessex Mints', 17; Dolley and Elmore-Jones, *BNJ* xxviii (1955-7), 27 f.; Lyon, *BNJ* xxxi (1962), 51-2.

²⁸ Aylesbury only struck Crux, and its two moneyers, Ælfgar and Leofstan, were probably both London moneyers. On Hertford see C. Blunt, 'Origins of the Mints of Hertford and Maldon', *BNJ* xli (1972), 21-6, and Dolley, *BNJ* xxix (1958-9), 54-8, and I. Stewart, *NC* 1971, pp. 237-42. In its early history Hertford shared a moneyer with Maldon. It is extraordinarily active in Crux with six moneyers and is supplied from London like other mints in the Southwark/Hertford wedge.

²⁹ Suggested by Metcalf, *SCMB* 1977; Stewart, *NC* 1975, and cf. Stewart, 'The Early Coins of Æthelred's Crux Issue with Right-facing Bust', *NC* 1971, pp. 237-42.

³⁰ With the possible exception of Berkeley all these manors rendered the 'farm of one night' in 1066 and were central to royal provisioning, see my forthcoming paper 'The Farm of One Night and the Organisation of King Edward's Estates in Domesday', *EcHR* 1979/80.

³¹ C. S. S. Lyon, 'Some Problems...', p. 197 n. 4, and *BNJ* xxxix (1970), 200.

³² See, e.g., Dolley and Elmore-Jones, 'An Intermediate Small Cross Issue of Æthelred II and Some Late Varieties of the Crux Type', *BNJ* xxviii (1955-7), 84, and cf. Dolley, 'Three Late Anglo-Saxon Notes', *BNJ* xxviii, 99-103.

³³ Dolley, 'Further Southampton/Winchester Die-links in the Reign of Æthelred II', *BNJ* xxxv (1966), 25-33; Elmore-Jones, 'Southampton-Winchester Die-links in Cnut's Quatrefoil Type', *BNJ* xxxix (1970), 6-11.

³⁴ All traceable Southwark moneyers occur also at London. London had other less regular links, see Dolley and G. van der Meer, 'A Die-link between the Mints of Dover and London at the End of the Reign of Æthelred II', *BNJ* xxix (1958-9), 416-17, and Dolley, 'An Æthelred Die-link Between London and Hertford', *BNJ* xxix (1958-9).

³⁵ I. Stewart, 'The Exeter Mint and its Moneyers', *Glendinning's Sale Catalogue*, 28 Oct. 1970.

³⁶ See, e.g., the pattern of the south-east in Last Small Cross.

Canterbury Moneyers: Ælfryd (previously at Hastings and London) Eadwold, also at London; Godman, also at Dover, Lewes, and London; Godric, also at London

are sometimes found operating in the small neighbouring mints,³⁷ and Norwich moneyers throughout East Anglia and some adjacent areas.³⁸ In some cases moneyers were sent out from large mints to open smaller ones.³⁹ Some individual moneyers such as Leofwine⁴⁰ and Hunewine⁴¹ have been shown to have had very varied career patterns, and die-links have established moneyer connections, at first sight improbable, between mints as far apart as Wilton and Hertford.⁴² Mints could be temporarily enforced with additional moneyers in particular circumstances: the mint of Bath for the consecration of King Edgar in 973,⁴³ and a whole series of eastern mints stretching from Thetford to Southwark which were reinforced by London moneyers during Crux. Such movements begin to appear normal rather than exceptional and seem to have occurred for a variety of reasons: for the establishment of new mints as at the Reform; to meet exceptional needs posed by the consecration or the gelds; to meet irregular needs at small mints; or simply to collect dies for a new type.

These movements are suggestive and problematic. If some mints were regularly supplied from other centres should they be regarded as mints or rather as places at which moneyers occasionally worked? Who controlled the moneyer movements and what is their significance for understanding die-cutting patterns? These questions still remain to be answered. But all such movements underline the flexible organization of the late Saxon coinage, and at the same time the predominance of the great minting centres of London, Winchester, Canterbury, Exeter, Norwich, Chester, Lincoln, and York. These were not only the main centres which supplied moneyers to other mints but also the most regular die-cutting centres.

In most issues after 973 some local die-cutting occurred. The desire to return to local die-cutting seems to have been strong, due probably to the economic and political issues involved in die supply. When dies were centrally cut throughout an issue, moneyers from all mints, including those such as York or Lincoln with long traditions of supplying their own dies, would be forced to purchase all their dies from

(previously many other connections); Godwine, also at Rochester, London, and Cissbury; Leofstan, also at Romney, Lewes, Colchester, and London; Leofnoth, also at Lewes and London; Wulfstan, also at London; Ulf.

Dover Moneyers: Brihtmær, also at London; Cynsige (previously at London); Eadsige, also at Hastings and London; Godman (above); Leofric, also at London (previously at Rochester, Canterbury, and Lymne); Manninc.

Lewes moneyers: Ælfweard, also at Hastings and London; Godwig; Leofa (previously Hastings); Leofnoth (above); Leofstan (above); Leofwine, also London (name previously occurs at many mints including Romney and Dover); Onlaf; Godeferth; Godman (above); Wine.

Rochester moneyers: Ælfheah; Eadnoth (previously London and Chichester); Eadweard, also London (previously Lymne); Godwine (above).

Romney moneyers: Leofstan (above); Wulfnoth (previously name known at Thetford, Dorchester, Winchester, and Northampton).

These can only be tentative identifications, but do

suggest a degree of movement within the south-eastern mints.

³⁷ Leman who struck First Small Cross at Caistor was at Lincoln in Crux.

³⁸ See, e.g., the Norwich moneyers Lyfinge at Cambridge and Ipswich in 973; Brantine active also at Ipswich in First Hand; Folcard who appears at Thetford in Crux; Eadmund active also at Cambridge in Crux.

³⁹ See, e.g., G. van der Meer, 'A Second Anglo-Saxon Coin of Reading', *BNJ* xxxi (1962), 161, identifying the moneyer Corff who opened the Reading mint and was previously active at London.

⁴⁰ Lyon, 'Presidential Address', *BNJ* xxxix (1970), 200-3, 'Mint Organisation in Late Saxon England'.

⁴¹ M. Blackburn, 'The Mint of Watchet', *BNJ* xlv (1974), 13-38, esp. pp. 19-22.

⁴² Stewart, 'Early Coins of Æthelred's Crux Issue...', *NC* 1971.

⁴³ Dolley, 'The Eadgar Millenary—A Note on the Bath Mint', *SCMB* 1973, pp. 156-9, though S. Lyon has pointed out in personal correspondence that Wallingford is an equally exceptionally active mint in Circumscription Cross.

Winchester or London. At the same time, they would be deprived of income derived from their own sale of dies to mints in their own area. Centralization of die supply would thus be a financial burden and a loss of income, an income in which the ealdorman or reeve may once have shared. A share of the profits, one of which was presumably the manufacture and purchase of dies, may have gone to the local ruler both before and after Edgar's reform. During the 980s and 990s Edgar's reform was still a novelty. The remintings constituted a tax on trade and the use of money,⁴⁴ and judging from the heavy punishments found in Æthelred's third and fourth codes not a popular one.⁴⁵ The success of the reform may have been achieved in some circumstances by providing an incentive to the local ruler in the form of such profit. By the time of Domesday some certainly enjoyed such a share. In towns like Dover, the earl or count had a proportion, the third penny of the urban farm.⁴⁶ At Huntingdon, Leicester, and Chester⁴⁷ Domesday specifies that the earl or count took a third of the moneyers' payments. If profit arose from local die-cutting the ealdorman may well have shared it. From 975 onwards such local production of dies was often allowed. In some cases it may represent an inability to enforce centralization, and it is notable that York and Lincoln at the very edges of royal authority cut some of their own dies in every issue which they struck between 975 and 1016. But in other cases local die-cutting may represent the grant of a local privilege in specific political circumstances, and an examination of the changing patterns of local die-cutting in relation to political changes may be revealing.

More than forty mints have been shown to have been active during Edgar's Reform type.⁴⁸ Some are almost certainly new, such as Winchcombe, Cambridge, and Ilchester, others may have reopened after intermittent activity. This issue also saw the appointment of many new moneyers. This may be partly an illusion created by the possibility of identifying mints and moneyers after the reform, but it should be remarked that a large proportion of the moneyers who struck this issue at York, Lincoln, Stamford, Norwich, and Winchester have names hitherto unrecorded on Edgar's earlier coinage.⁴⁹ The smaller mints which were now opened or reinforced may often have acquired moneyers from elsewhere. On the basis of name identity alone it is possible, for example, that Chester supplied moneyers to Hereford and Stafford;⁵⁰ that Winchcombe received a moneyer from London;⁵¹ that Shrewsbury gained one who had passed through Gloucester,⁵² and that Gloucester itself acquired two moneyers who may have come from Winchester.⁵³ The movements of moneyers in these west midlands mints already suggests links both north and south, phenomena also observable in their later die supply.

The East Anglian mints present an interesting picture in this issue. Cambridge and

⁴⁴ IV Atr. 7 (printed F. Liebermann, *Die Gesetze der Angelsachsen* (Halle, 1903-16), vol. 1) makes clear the trader's obligation to ensure that he is using money of the correct weight and type.

⁴⁵ III Atr. 8 and 16; IV Atr. 5.

⁴⁶ D.B., vol. 1, fol. 1.

⁴⁷ D.B., vol. 1, fols. 203, 230, 262^v.

⁴⁸ For a list see Dolley and Metcalf, p. 145, to which may be added Barnstaple, K. Jonsson, 'Fyndet fran

Smiss: Tingstade sn pa Gotland', *NNA* 1975-6, pp. 66-82. I am grateful to M. Blackburn for this reference.

⁴⁹ At York, for example, the following new moneyers appear in the Reform issue: Brentine, Gunnulf, Iohan, Isulf, Osmund, Tumma, Unspac.

⁵⁰ Gyllis to Hereford, Ælfsige to Stafford.

⁵¹ Ælfnoth to Winchcombe.

⁵² Sigewald.

⁵³ Wynsige and Æthelstan.

Ipswich were opened or reopened in 973, apparently stimulated into life by a Norwich moneyer Lyfinge. With four known moneyers striking this type Norwich was the most important mint in East Anglia. There are few Old Norse names among the East Anglian moneyers, but there are a number of Old English names which are also common in Wessex, plus three Old German names.⁵⁴ Continental Germans were important at Winchester in the Reform issue.⁵⁵ The hand of ealdorman Æthelwine may be discernible here. Æthelwine, son of ealdorman Athelstan Half King, was very prominent at Edgar's court. Norfolk, Suffolk, and Cambridge, the areas supplied with moneyers from the Norwich centre, are also areas under Æthelwine's jurisdiction.⁵⁶ His links with the royal court could certainly have led to his import of three German moneyers into the East Anglian mints. Moneyers were also sent out from Winchester and London to other mints in the Reform type, and there is already evidence for the importance of Canterbury as a source of moneyer supply in the south-east⁵⁷ and of Exeter in the south-west.⁵⁸

The Reform type was continued as the issue of the reign of Edward the martyr, but not unchanged.⁵⁹ During Edward's reign the absolute uniformity of die-cutting found in Edgar's Reform type gives way to local schools of die-cutting, similar though not identical to the old tenth-century pattern. Dies were cut locally at Lincoln, York, in Kent, and at a centre in East Anglia which supplied parts of East Mercia and Middle Anglia. The troubled accession of Edward led to a return to local die-cutting in some areas, and the explanation may well be political. At some date between 975 and 979 York made a gesture of virtual independence in the appointment of earl Thored.⁶⁰ Local die-cutting here would be a sign of the difficulty of central control. Lincoln too may simply represent a return to local die-cutting in political circumstances which made centralization difficult to enforce. Lincoln may have been in the control of Ælfhere of Mercia and the revival of the local cutting of dies might thus be a sign of his opposition to Edward.⁶¹ East Anglia and Kent were also die-cutting areas in this issue. In these cases the privilege would be granted to favoured royal supporters. In the struggle for the throne after the death of Edgar, Æthelwine of East Anglia and Dunstan, Archbishop of Canterbury, were the most important supporters of

⁵⁴ Erconbold, Northberd, Albart: compare one possible Old Norse name, Oslac. Old English names, Lyfinge, Leofric, and Ælfgar.

⁵⁵ Regenold, Regenulf, Marscale, and compare Flodvin at Chichester.

⁵⁶ Liber Eliensis, ed. E. O. Blake, *Camden Society*, ser. 3, vol. xcii (1962), bk. 2, cap 11a, where he presides over the moots of East Anglia and Cambridge.

⁵⁷ Lynne, for example, had a moneyer Æthelstan from either Canterbury or London.

⁵⁸ See, e.g., Æthelferth active at Exeter in Edgar's third type and at Ilchester in the Reform issue.

⁵⁹ For this discussion of die-cutting patterns under Edward the Martyr I am grateful for personal information from Professor Dolley and for permission to use S. Lyon's unpublished paper 'The Hand Types of Æthelred II in the Context of Edgar's Reform'. The importance of the study of regional die-cutting after 975, pioneered by Dolley, is underlined in, for example, S. Lyon's 'Presidential Address', *BNJ* xxxix (1970), 200-3.

For die-cutting patterns earlier in the tenth century see Blunt, 'The Coinage of Athelstan', and Dolley, 'The Mint of Chester', *J. Chester and N. Wales Archaeological Society*, xlii (1955).

⁶⁰ For Thored, see D. Whitelock, 'Dealings of the English Kings with the North in the Tenth- and Eleventh-centuries', *Anglo-Saxons. Studies presented to B. Dickins*, ed. P. Clemoes (London, 1959), pp. 78-80. My forthcoming paper 'The Reign of Æthelred' contains a detailed study of the succession crisis after 975.

⁶¹ Ælfhere was a supporter of Æthelred and related to his mother, see the bequests to her in his brother's will, P. H. Sawyer, *Handlist of Anglo-Saxon Charters* (London, 1968), no. 1485; and the grant of land made to Ælfhere early in the reign, Sawyer 834. He was ealdorman of Mercia (below n. 68). Whether he controlled Lincoln is uncertain, but note his links with Godwin who may be the same man who was a local ruler here between the 990s and 1016 (below n. 111).

Edward.⁶² Æthelwine's jurisdiction covered East Anglia and East Mercia.⁶³ Dunstan was probably also a local ruler. By the 990s the Archbishops of Canterbury fulfilled most of the functions of an ealdorman in Kent,⁶⁴ and it seems likely that Dunstan already filled such a position under Edgar and Edward the martyr. The support of these two men, crucial to Edward, would be consolidated by a grant of the right of local die-cutting. Thus the die-cutting pattern after 975 would reflect both political pressures and problems of control in the north.

This same pattern persists in the last two stages of the type during the first months of the young Æthelred's reign. But it begins to change during Æthelred's first full issue, First Hand. The die-cutting pattern of this type has been examined by Dolley and Talvio.⁶⁵ At the beginning of the issue in 979 a single centre which may have been Winchester or London was furnishing dies for the whole of southern England except the south-east. The supply of southern England as a unity is found in most issues from now on, and underlines the fact that this was the area in which the king had most freedom of action and found it least necessary to pander to local rulers. Here royal power was always strongest.⁶⁶ At the same time there were die-cutting centres at Canterbury, Chester possibly, Lincoln, York, and Norwich. Norwich provides dies for the East Anglian mints throughout the issue until 985. The power of Æthelwine was unquestioned, and the young king had quickly to come to terms with him. At the beginning of the issue Canterbury supplied dies to Rochester, Lewes, and Lymne, but it ceased to function as a die-cutting centre quite early in the type. Dunstan had been a supporter of Edward in the succession dispute, and one factor in that dispute had been the enmity between Dunstan and Æthelred's mother Ælfthryth.⁶⁷ Ælfthryth was a prominent figure during Æthelred's early years, and it is not surprising to find Dunstan's power and privileges trimmed. Chester, if it was a die-cutting centre at all in this type, disappears very early. The town was sacked by the Vikings in the winter of 979.⁶⁸ When the mint revived it received its dies from a midlands centre, the one which from the beginning of the issue had cut the Midlands A and B types, a centre which Dolley suggests should be identified as Lincoln. Midlands A and B dies are found at mints ranging from Lincoln through Derby to Worcester, an area which corresponds to much of what we know to have been Ælfhere of Mercia's ealdormanry.⁶⁹ Ælfhere was one of the most important men at Æthelred's court in these years, until his death in 983. Derby and Lincoln apparently received dies from York at the beginning of the issue, but this link was soon severed. The severance of the link between York and the north midlands is likely in view of the problems which the

⁶² Dunstan's support of Edward is suggested by *Passio Sancti Edwardi*, ed. C. Fell (Leeds, 1971), II, 17-18, and Florence of Worcester, *Chronicon ex Chronicis*, ed. B. Thorpe (London, 1848-9), I, 145.

⁶³ Above n. 56, and Vita Oswaldi, *Historians of the Church of York and its Archbishops*, ed. J. Raine (Rolls Series, 1879), I, 444.

⁶⁴ See, e.g., II Atr. Preamble. For the early appearance of a shireman in Kent see Sawyer 1458, 1456, 1461. Archbishop Ælfric left a warship in his will c. A.D. 1006 to the men of Kent for their defence.

⁶⁵ Dolley and T. Talvio, 'Regional Styles in First Hand', *BNJ* xlvii (1977), 53-65.

⁶⁶ See the maps of royal demesne and royal itineraries in the *Æthelred Millennium*.

⁶⁷ For fuller details see my 'Reign of Æthelred II',

⁶⁸ Dolley and E. Pirie, 'The Repercussions on Chester's Prosperity of the Viking Descent on Cheshire in 980', *BNJ* xxxiii (1964), 39-44.

⁶⁹ Ælfhere is the ealdorman who witnesses all Bishop Oswald's charters in Worcestershire, Gloucestershire, Warwickshire, and Oxfordshire. *Vita Oswaldi*, p. 443, calls him *princeps Merciorum gentis*, though it is clear from *ibid.*, p. 444, that his rule did not extend over the whole of East Mercia.

English kings experienced in the control of York, especially between the exile of Osloc in 975 and the appointment of Ælfhelm in 993.⁷⁰ It may also have provided an opportunity to enhance the power of Ælfhere. Lincoln became the major die-cutting centre for much of English Mercia after 979, replacing Chester. It is likely that Ælfhere would have retained control of this new centre. By the end of First Hand there were four die-cutting centres active, York, Lincoln, Norwich, and London/Winchester.

The succeeding issue, Second Hand, is one of the most contentious of all the types which followed Edgar's reform.⁷¹ It exhibits great uniformity of style, nearly all the dies were cut at a single centre, and it is overwhelmingly a southern issue. Only one coin from the mints of York and Lincoln has so far been found. The presumption must be that the new type could not be enforced in the north. In 985 Æthelred exiled Ælfhere of Mercia's successor Ælfric.⁷² York was still under the power of Thored, who seems to have been increasingly less amenable to royal control (below). After 985 Æthelred was reviving some of the policies of his father Edgar, and was trying to recover some of the ground lost during the political turmoil after 975. The spate of new ealdormen who had been appointed during, and as a direct result of, the political crisis were not replaced when they died during the 980s⁷³ reflecting a policy of Edgar's later years; Ælfric was exiled and not replaced, and attempts may have been made to trim the power of some of those who had directly profited from the succession dispute. A decision to supply dies centrally and to suppress the local die-cutting, which it has been argued may itself have arisen as a response to that dispute, would also mark a return to the policy of Edgar's reform issue. Such a decision may have proved unacceptable or unenforceable in the north. It is politically, if not economically, possible that York and Lincoln were suppressed during Second Hand because of the king's inability to pursue this policy here. There is a little evidence to support the view that York was suppressed and did not merely continue to strike First Hand. Thirty-seven moneyers are known to have struck Crux at York, the highest known number of moneyers at this mint in any of Æthelred's issues. The majority of these are not previously recorded as York moneyers, and the situation is similar if not so pronounced at Lincoln. This discontinuity of moneyers between the two issues, First Hand and Crux, is especially marked at these two mints, and it could be argued that they had been closed and were restaffed in a great reshuffle perhaps associated with the appointment of Ælfhelm to York in 993 (three of the new moneyers at York may have come from the Five Boroughs, his own area of provenance⁷⁴). But the discontinuity may also be simply a sign of the recruitment of new moneyers to meet an apparently heavy output at York during Crux, and any suggestion that the north of England was coinless for a six-year period must be open to serious doubt.

At the end of Second Hand a short-lived experiment was made with a third variant of the Hand type, Benediction Hand. It appears that this motif was being considered

⁷⁰ See Whitelock, 'Dealings . . .',

⁷¹ For some of the debate over Second Hand see Petersson, *op. cit.*, pp. 81-5; P. Grierson, 'Royal Numismatic Society Presidential Address', *NC* 1959, p. iv; Lyon, 'Some Problems . . .', pp. 200ff.

⁷² A.S.C. MS. C s.a. 985.

⁷³ Æthelmær of Hampshire and Edwin of Sussex had died in 982, A.S.C. MS. C s.a.

⁷⁴ Osulf, at Leicester in First Hand, and at Leicester and/or Derby under Edgar; Oiga, possibly a Stamford moneyer under Edgar; Sumerleda, at Nottingham in First Hand.

as the distinctive reverse of the reign. Endless radical change posed die-cutting difficulties and might prove unacceptable in more conservative areas, and some pressure for continuity may have existed. Benediction Hand, though short-lived, shows the same pattern of central die-cutting as Second Hand, but seems to have been cut by a different workman.⁷⁵

The new type eventually adopted was Crux. At the beginning of this issue dies were all centrally supplied. Later distinctive styles emerged from which it is already possible to distinguish a group of dies cut at York, and differences suggesting that dies may have been cut at both London and Winchester. Further work on the styles in Crux will probably reveal even more complexity. In the late, so-called Small Crux variety, for example, it has already been shown that dies were cut in the south-east (probably at Canterbury), at London, and possibly elsewhere.⁷⁶

The 990s saw several important changes in the great ealdormanries. In 993/4 three new appointments were made, Ælfhelm to York, Leofwine to West Mercia, and Leofsige to Essex.⁷⁷ Thored had been ealdorman at York from the beginning of the reign until 992. Until 985 he was fairly regular in his attendance at the royal court⁷⁸ and it is probably to these years that the marriage of Æthelred to his daughter is to be dated. From 985 until c. 990 he appears at court only twice, in 988⁷⁹ and at a meeting in London in 988/90.⁸⁰ In the early 990s attempts seem to have been made to forge better relations, and in 992 he had joint command of a royal expedition against the Vikings.⁸¹ The expedition proved unsuccessful, and perhaps for this as well as for other reasons Thored disappears in 992 to be replaced at York in 993 by Ælfhelm. The deaths of Æthelwine of East Anglia in 992 and Brihtnoth of Essex in 991 thus left England north of the Thames without an ealdorman by 992. Æthelred remedied this by a series of appointments made in 992/4 of Ælfhelm, Leofsige, and Leofwine.

These political developments are reflected in the coinage. Difficulties at the York mint between 985 and c. 990, followed by a reopening c. 990 with dies centrally supplied would fit what little we know of Thored's career. The appointment of Ælfhelm in 993 marked a determined attempt to consolidate rule in the north and it seems likely that Ælfhelm's loyalties would be cemented by permission to reopen the York die-cutting centre. It has already been remarked that some of the new moneyers at York may have accompanied Ælfhelm from the Midlands.⁸² The return to more regional die-cutting observable generally in Crux would fit with a policy of new appointments to ealdormanries. It is possible, for example, that the south-east die-cutting centre is relevant to the appointment of Leofsige, if not to one of the two archbishops Sigeric or Ælfric.

In Crux it is clear for the first time that dies are being cut at both Winchester and London to supply southern England. This is just one of many indications of the

⁷⁵ I am grateful to Professor Dolley and S. Lyon for personal information on Benediction Hand.

⁷⁶ I am grateful to Mark Blackburn for personal information on the development of styles in Crux. On Small Crux styles see I. Stewart, 'The Small Crux Issue of Æthelred II', *BNJ* xxviii (1955-7), 509-17.

⁷⁷ Ælfhelm first appears as a charter witness in 993, Sawyer 876; Leofwine appears in 994, S. 880; and Leofsige in the same charter.

⁷⁸ S. 834, A.D. 979; S. 843, 844, 845, 848, and 851, A.D. 983; S. 855, A.D. 984; S. 856, 858, and 860, A.D. 985.

⁷⁹ S. 872.

⁸⁰ S. 877.

⁸¹ A.S.C. MS. C s.a. 983.

⁸² For details of Ælfhelm and his family see Whitelock, 'Dealings . . .', pp. 80-1, and P. H. Sawyer, 'The Charters of Burton Abbey and the Unification of England', *Northern History*, x (1975), 28-39, and above n. 74.

growing importance of London to the West Saxon kings in the late tenth century. London and Winchester appear in other contexts as jointly important in the administration of the coinage and the connected weights and measures. Under Edgar, in his third law code cap 8, London and Winchester are cited as operating the standard of weights and measures which was to be generally used, and the same chapter enjoins a uniform coinage. This close connection between weights and the coinage is found again in Æthelred's fourth code, cap 9.2, where weights are to be standardized according to the weight at which the king's money is received.

Crux is the first issue in which a great upsurge of production occurs which can be associated with Danish raiding⁸³ and the first acute strains on the mint-pattern. Production was particularly heavy in certain areas. Many of the mints of eastern England from Southwark to Thetford were reinforced by London moneyers to meet an apparently extraordinary demand for coin. London may also have supplied additional moneyers to the Thames valley mints of Aylesbury and Wallingford and into the south-east,⁸⁴ and other centres such as Exeter seem to have done the same in their areas.⁸⁵ Many mints had particularly large numbers of moneyers active in this issue.⁸⁶ For the first time Crux raises questions of why such additional supply was required, how it was arranged, and how it relates to geld payment.

It cannot be assumed that all payments made to the Danes during Æthelred's reign have been entered into the Anglo-Saxon Chronicle, nor that *all* the gelds entered there were truly national payments. Many local gelds were paid, and some of those which had the help and authorization of the king and found their way into the pages of the Chronicle were local. The first recorded payment of geld is in 991, 10,000 pounds following the harrying of East Anglia, Essex and the south-east.⁸⁷ The defence itself had been on a local scale, as witness the famous encounter of Brihtnoth at Maldon, and there is no reason to suppose that this geld was not itself local. In 994 a treaty, now surviving as the first part of the second code of Æthelred, was negotiated with the Viking host which had been ravaging southern England. Although the king was involved, this was again a local peace, negotiated and paid for by the rulers of England south of the Thames, Æthelweard of West Wessex, Ælfric of East Wessex, and Archbishop Sigeric.⁸⁸ Sigeric had to raise much of the money himself in an *ad hoc* fashion by the sale of land, and the Vikings threatened to burn

⁸³ For the upsurge of coining see Petersson's tables 12-20, which also illustrate the eastern bias of Crux. D. M. Metcalf, 'The Ranking of Boroughs . . .', quotes figures demonstrating the scale of this surge. The survival from about this date of large hoards from Scandinavia clearly affects these figures, and Metcalf's statistical caveats in the 'Ranking of Boroughs . . .' and 'How Large was the Anglo-Saxon Currency?', *EcHR*, 2nd ser. xviii (1965), 475-82, are pertinent.

⁸⁴ The following names connect London and Wallingford: Ælfweard, Ælfwig, Leofric; London and Oxford: Ælfwine, Æthelwine, Wulfwine; London and Aylesbury: Ælfgar, Leofstan. The following appear at London and one or other of the south-eastern mints of Dover, Lewes, Rochester, and Canterbury: Ælfgar, Ælinoth, Brihtmar, Goldwine, Leofric, Leofstan, Leofwine, Sidwine, Wulfstan.

On the basis of information in Smart, 'Moneyers of

the Late Saxon Coinage . . .', Colchester, Aylesbury, and Southwark opened in this issue.

⁸⁵ Exeter is linked with Totnes and Ilchester (Huncwine) and Ilchester (Leofric).

⁸⁶ The following mints had large numbers of moneyers active during Crux: York, Lincoln, Worcester, Cambridge, Thetford, Colchester, Hertford, Wallingford, Southwark, Sudbury, Winchester, Wilton, Wareham, Ilchester, Totnes.

⁸⁷ A.S.C. MS. C. s.a. 991.

⁸⁸ II Atr. Preamble. The king is associated with the payment but the peace is bought by the southern English shires. S. 943, a grant of land to the Dane Toti who 'dedit mihi in adiutorium unius libre argenti appensionem de auro purissimo ad reddendum tributum' underlines the *ad hoc* fashion in which many of these payments were probably raised. For Archbishop Sigeric selling land at Risborough to Bishop Aescwig of Dorchester see

down his cathedral if he failed to pay quickly the money he had promised. The capture of Archbishop Ælfheah in 1012 was also designed to raise a payment locally, this time by way of ransom, which the Archbishop refused to allow. There are other indications that the gelds recorded in the Chronicle are not all nationally raised. In 1002 negotiations with the Danes prior to payment were undertaken by ealdorman Leofsige of Essex, and this may be because the threat to be bought off was largely to his area of jurisdiction in south-east England.⁸⁹ In 1004 a decision to buy peace is stated to have been made by the East Angles⁹⁰ and in 1009 the men of East Kent bought off the Danes with 3,000 pounds.⁹¹ It is not until the geld of 1006/7, which took a long time to collect and is stated to have been paid *geond Angelcyn*, that we can be certain that we are dealing with payments which are not local. As the Chronicler himself laments, the English defence in general was fragmented and no area would help another.⁹² There is no evidence that these gelds, as opposed to the later regular heregeld to pay mercenaries, were collected nationally on the basis of the hide.⁹³

The Anglo Saxon Chronicle for Æthelred's reign is a partial and geographically and chronologically biased account of the reign.⁹⁴ The chronicled geld payments are not reflected in the rate of coin survival. For example, on any dating argument the geld of 1007 must have been paid during the Helmet issue, a sum of 30,000 pounds, the largest so far recorded in the Chronicle. But Helmet is the least well represented of Æthelred's later issues in Scandinavia.⁹⁵ Factors governing hoarding there must of course be taken into account, but it still seems likely that the quantities of coins surviving from Æthelred's issues such as Crux, Long Cross, and Last Small Cross reflect the payment of other unrecorded gelds. Future study of extraordinary outputs may actually eke out our knowledge of the areas and dates of Viking raiding. It may be, for instance, that the reinforcement of the western mints during Long Cross (below n. 108) is evidence of raids in this area unrecorded in the Chronicle, but the essential background to Æthelred's Irish sea campaign in A.D. 1000. These extraordinary outputs appear to signal the rapid raising of a local payment.⁹⁶ The eastern

S. 882, A.D. 995. Æscwig had given 'nonaginta libras meri argenti ducentasque purissimi auri manecas'. S. 1488, the will of Archbishop Ælfric forgiving debts owed him by the men of Kent, Middlesex, and Surrey, suggests the making of local payments by local rulers, since this is the most likely way in which such debts would have been incurred, and compare the will of King Eadred, S. 1515, leaving sums of money to various shires to be used to pay off the Danes, in each case entrusted to the keeping of the local bishop.

⁸⁹ A.S.C. MS. C s.a. 1002. For the area of Leofsige's jurisdiction see S. 891 where he is called ealdorman of Essex; *Liber Eliensis*, bk. 2, cap. 66, sees him witnessing a will in Cambridgeshire (a normal function of an ealdorman); S. 883, where he brings an accusation against the royal reeves of Oxford and Buckingham, which may mean that his jurisdiction extended here. His predecessor, Brihtnoth, had also had jurisdiction in Huntingdonshire, see *Liber Eliensis*, bk. 2, cap. 25.

⁹⁰ A.S.C. MS. C s.a. 1004.

⁹¹ A.S.C. MS. C s.a. 1009 with 3,000 pounds, Com-

pare also the local payment demanded by Swegn in 1013 from St. Edmund's Bury, *Fl. Wig.* bk. I s.a.

⁹² A.S.C. MS. C s.a. 1010.

⁹³ F. Harmer, *Anglo-Saxon Writs* (Manchester, 1952), pp. 513-14. The first geld which was widely collected seems to have been that of 1007, decided upon in 1006, though again there is no evidence that it was not collected in *ad hoc* ways.

⁹⁴ See C. Plummer, *Two Saxon Chronicles Parallel* (Oxford, 1899), vol. ii, pp. lxxiv n. 3; lxxxix and esp. cxvi where he attributes the account to Canterbury.

⁹⁵ See Petersson's tables (above n. 85).

⁹⁶ Tributes and gelds could call additional coin into circulation, see Heming, *Chartularium Ecclesiae Wigorniensis*, ed. T. Hearne (Oxford, 1723), i. 248. Worcester lost much as a result of the great tributes taken during Swegn's devastations, 'ob huius itaque tam gravis tributū exactionem omnia fere ornamenta huius ecclesie distracta sunt, tabule altaris, argento auro parate, spoliatae sunt textus exornati, calices confracti, crucis conflatae'.

bias of Crux, and the reinforcement of mints in the Southwark/Thetford wedge, could be the first efforts to pay off the Danes in eastern England. Crux was also an issue during which many mints in Wessex and the south-east were reinforced, perhaps in 994 or in the raiding which preceded that payment, and additional moneyers were also at work in the Severn Valley and the north. As the intensity of Viking raiding increases after 990 the coinage may well show strange patterns and bursts of activity as it responds to local pressures.

At the end of Crux there were a variety of experiments with the new type, and a return to the Small Cross motif of Edgar's reform was considered.⁹⁷ The experiments were carried out at Winchester which was clearly still a dominant die-cutting centre, though it is possible that Small Crux was a similar experiment at the London die-cutting centre.⁹⁸ Winchester and London both supplied the initial dies for the type eventually adopted, Long Cross, and London supplied a larger area than Winchester. Later a Lincoln die-cutting centre emerges, one possibly at Shrewsbury and then at Canterbury, York, Chester, and perhaps Stamford and Oxford.⁹⁹ There is as yet no political explanation of the appearance of Oxford and Stamford. Shrewsbury and/or Chester would mark the jurisdiction of ealdorman Leofwine who had control of the west midlands. The apparent disappearance of East Anglia as a die-cutting centre between 991 and 1009 is of some interest. The death of Æthelwine in 991 removed the control of his family in this area and no successor was appointed to the ealdormanry. By 1004 Ulfcytel was displaying many of the powers of an ealdorman here although he never received the title,¹⁰⁰ and he may well be one of the high reeves who begin to appear about this date. The eclipse of the East Anglian centre again suggests the importance of political factors in determining die-cutting patterns.

Work on the die-cutting patterns in Helmet is not yet sufficiently advanced to make attempt at political correlation profitable.

In 1009 at the end of Helmet there was another abortive experiment, this time with the so-called Agnus Dei type.¹⁰¹ The penitential Lamb on the obverse must be associated with the law code VIII Æthelred issued in 1009, which was a purely penitential ordinance calling for prayer and fasting to counter Viking attacks. The Holy Spirit on the reverse brings the wisdom of God to the English. This iconography and the law code to which it relates so closely are both signs of the influence of Archbishop Wulfstan of York, by now a dominant figure at court. The type was never generally issued though the few examples which survive show that its die-cutting pattern would probably have been the same as that of Last Small Cross. Dolley has shown that it was cut at Winchester, London, and possibly at Chester or

⁹⁷ On these experiments see Lyon, 'Some Problems', p. 200; Stewart, *BNJ* xxviii (1955-7); Dolley, 'Some Further Remarks on the Transitional Crux Issue of Æthelred II', *BNJ* xxix (1958-9), 259-64, all on Small Crux and Transitional Crux varieties. On Intermediate Small Cross see Jonsson, *NC* 1977, Dolley and Elmore-Jones, *BNJ* xxviii (1955-7), 75-88, and Stewart, 'Notes on the Intermediate Small Cross and Transitional Crux Types of Æthelred II', *BNJ* xxxvii (1968), 16-24.

⁹⁸ I am indebted to Mark Blackburn for personal information on the styles which probably developed in this type.

⁹⁹ The style so prevalent at Stamford is also found at Lincoln and the East Anglian mints and may be an earlier or later sub-style of the Lincoln die-cutting centre. Similarly the 'Oxford' style may be a mere variety of the Winchester style. I am grateful to Mark Blackburn for this information.

¹⁰⁰ For Ulfcytel as leader of the East Angles see A.S.C. MS. C s.a. 1004, 1010, 1016. *Fl. Wig.* s.a. 1016 calls him *dux*, but he never receives the title in any charter of the reign.

¹⁰¹ I am indebted to Professor Dolley for allowing me to see his unpublished manuscript on this type.

in the Severn Valley.¹⁰² He has suggested that the type was countermanded partly because the dies would have been difficult to cut, and if the decision to allow widespread die-cutting had already been taken this would have been an important consideration. The return in 1009 to the Small Cross motif not only provided a simple style to cut, but represented an evocation of King Edgar and the use of a reverse which had been popular and widely used during the tenth century. The adoption of this motif underlines the fact that from its very inception Last Small Cross was dominated by political factors.

Last Small Cross has the most complex die-cutting pattern so far discovered in any of Æthelred's issues.¹⁰³ Dolley first distinguished die-cutting centres operative at London, Winchester (SA and SB), York (NA and NB), in the west, south-west, south-east, and East Anglia. Lyon's latest work on the issue, as yet not fully published,¹⁰⁴ suggests further refinements. At the beginning of the issue the dies used to cut heavy coins were cut at Winchester (SB) which supplied central Wessex, East Mercia, and East Anglia; in the south-west, supplying mints in the south-west and some in eastern England; at a West Mercian centre which supplied not only Oxford/Wallingford but also London; at Lincoln (NB) and at York, which cut a distinctive variety of NA. As the type progressed the die-cutting pattern changed. London began to produce dies which supplied east and south-east England, subsequently giving rise to regional imitations at Canterbury and Norwich and local styles at Ipswich, Rochester, and possibly Lewes. Lincoln and York continued to cut their own dies. The south-west, West Mercia, and Winchester all continued to function as die-cutting centres, but now with a more comprehensible local distribution of the dies produced. The existence of anomalies of die supply in this issue was recognized by Dolley, and Lyon has now pin-pointed most of these geographical anomalies to the beginning of the issue and suggests that the cancellation of the Agnus Dei type and the pressure of Viking attacks may lie behind many of these anomalies. The eastern mints in particular were supplied with dies from a wide variety of centres. Last Small Cross was generally an issue of high production, but this is especially marked in eastern England. Abnormally large numbers of moneyers were active in eastern mints in this issue; Lincoln, for example, has so far recorded thirty-six moneyers of this type.¹⁰⁵

Political circumstances, the pressures of external attack, and moneyer movement to meet the extraordinary demands for coin at a time of heavy geld payments will all help to explain the patterns observable in Last Small Cross. The movements of the London moneyer Leofwine during this issue have been verified through die-links.¹⁰⁶ He was connected with the mints of Gothaburh in the south-west, the emergency mint of Cissbury and Stamford as well as London. Although they relate to the subsequent issue, Quatrefoil, Blackburn's remarks on the moneyer Hunewine of Watchet and his movements are pertinent.¹⁰⁷ Hunewine was active at several mints during

¹⁰² See M. Dolley, 'The Nummular Brooch from Sulgrave', *England before the Conquest*, ed. P. Clemoes and K. Hughes (Cambridge, 1971), pp. 333-49.

¹⁰³ R. H. M. Dolley, 'Some Reflections on Hildebrand Type A of Æthelred II', *Antikvariskt Arkiv*, ix (Stockholm, 1958) on which all remarks on areas of die supply, etc. are based, unless otherwise stated.

¹⁰⁴ Lyon remarked on some of these regional centres in *BNJ* xxxv (1966), 35. In generous personal corre-

spondence he has amplified his remarks.

¹⁰⁵ Cf. the numbers of Lincoln moneyers for other Æthelred issues: First Hand, 11; Crux, 19; Long Cross, 16; Helmet, 22; Last Small Cross, 36.

¹⁰⁶ Lyon, 'Presidential Address . . .', *BNJ* xxxix, esp. p. 203.

¹⁰⁷ M. Blackburn, 'The Mint of Watchet', *BNJ* xlv (1974), 13-38, esp. 19-22.

Quatrefoil, and used dies from several different sources. His activity was characterized by the use of dies from the *same* source at any one time, no matter at which mint he was striking. Such moneyer movements, coupled as they could be with die movements, help account for the die anomalies in Last Small Cross. These anomalies are most evident in the eastern mints which are the ones most likely to have been reinforced by moneyers from outside. Eastern England was by now the centre and theatre of royal defence, and may thus have borne the brunt of the additional demand for coin.¹⁰⁸

The anomalies are concentrated in this area. Much of the pattern of die-supply in this issue makes geographical sense and can be interpreted in administrative and political terms. The Western centre represents the jurisdiction of Leofwine, by now well established as ealdorman of West Mercia. The south-east would be the area ruled by the archbishop and his royal reeve. Could the murder of Archbishop Ælfheah in 1012 and the subsequent gap at Canterbury until 1014 be reflected in the development of the two local die-cutting centres at Rochester and possibly Lewes? East Anglia was under the authority of Ulfcytel, and its re-emergence as a die-cutting centre would reflect the growing importance of this local military leader. Lindsey had its own ealdorman/high reeve in Godwine,¹⁰⁹ and York was controlled by the powerful Uhtred of Bamborough.¹¹⁰ There was no ealdorman in the south-west from c. 1002 to 1014, though the men of this area recognized the authority of Æthelmær who led them to submit to Swegn in 1013.¹¹¹ A better understanding of how the south-west was ruled in these years might help explain the far-reaching distribution of dies from this area in eastern England at the beginning of Last Small Cross. During Last Small Cross Æthelred would thus have granted the rights of local die-cutting and the profits which went with them to most of the local rulers, and this is not surprising at a time when loyalty was at a premium during the last stages of the defence against the Danes. By this date many parts of England were controlled by high reeves,¹¹² and further research could well reveal yet more local styles based on their jurisdictions, producing a pattern in Last Small Cross akin to that of Quatrefoil.¹¹³ The large number of die-cutting centres operative during Cnut's first issue, dating from 1017/18, suggests a conciliatory new king allowing the privilege and profit of die-cutting to a larger number of local rulers than ever before.¹¹⁴

¹⁰⁸ The importance of the output of the eastern mints is brought out by Petersson's tables. The following mints had particularly large numbers of moneyers active in this issue: Leicester, Stamford, Huntingdon, Thetford, Norwich, London, Canterbury, Lewes, Winchester, Chester. Compare the pattern of exceptional activity in Crux: York, Worcester, Cambridge, Thetford, Colchester, Hertford, Aylesbury, Buckingham, Wallingford, London, Southwark, Rochester, Canterbury, Winchester, Chichester, Wilton, Wareham, Ilchester, Exeter; and in Long Cross: Chester, Bath, Exeter, Stamford, Wallingford, Lewes, Shrewsbury, Hereford. The activity in the north-west marcher mints in this issue may be connected with raids in the Irish sea which led to the king's attack on Cumbria and the Isle of Man in A.D. 1000.

¹⁰⁹ A.S.C. MS. C s.a. 1016 for his death at Ashingdon and *ibid.* 993 for Fraena, Godwine, and Frithegist, leaders of the army which failed to repel the Vikings who landed on the Humber. Only in A.S.C. MS. C s.a. 1016 is

he called an ealdorman, no man of this name ever receives that title in the charters of the reign. The Chronicle of Evesham (Rolls Series), pp. 78–83, identifies a Godwin who fell at Ashingdon with a despoiler of Evesham who was connected with Ælfhere of Mercia.

¹¹⁰ Whitelock, 'Dealings . . .', p. 82. His regular attendances at court date only from A.D. 1009, S. 921. He was appointed 1006 × 9.

¹¹¹ A.S.C. MS. C s.a.

¹¹² See my 'Reign of Æthelred . . .',

¹¹³ For work on Quatrefoil see Dolley, 'Regional Distribution of Dies in the West Country, 1017–23', *Spinks' Numismatic Circular*, lxxiii (1956), 321–5 and 373–7.

¹¹⁴ The chronological framework for the above arguments has been based on the dating of the issues of Æthelred proposed by Professor Dolley, a framework which accorded well at certain points with the historical evidence.

The coinage cannot be seen in isolation from other aspects of royal administration or from political factors. The problems of local separatism especially strong in the north, and the need to secure and keep the loyalty of the great magnates, were considerations which affected all aspects of royal government in the tenth and eleventh centuries. The development of local die-cutting after Edgar's reform seems to show particularly well how the coinage could respond to political pressures. Such local die-cutting may be a sign of reward for loyalty or support, as in the cases of Æthelwine and Dunstan under Edward the Martyr and Ælfhere early in Æthelred's reign. It may mark an attempt to woo loyalty, as at York under Ælfhelm after 993 and in the entire pattern of Last Small Cross. It may sometimes demonstrate the king's inability to exercise closer control, as may regularly be the case at York and Lincoln and more generally towards the end of the reign during the currency of Last Small Cross. Southern England was supplied for most of the time by the two royal centres of London and Winchester. This was in every sense the area of firmest royal control, where the royal demesne was concentrated, where the royally founded churches were situated, where the king was most frequently present. It is not surprising that it is here that royal control of the coinage is also firmest, although political factors have their part to play even here.

Study of die supply, moneyer movement, and changes in the mint pattern all demonstrate the flexibility of the organization of the Old English coinage, and in this and other ways advancing knowledge of the coinage has contributed much to an understanding of administration. Much still awaits discovery concerning the political geography of England at this date, and here in the future the coinage may have yet more to tell us. The system of which the coinage was a part was one operated by men in an age when ties of clientage and patronage at all levels of society were of paramount importance, an age in which the advantages derived from the manipulation of the coinage could not be ignored. The complicated political context in which the system was operated may never be fully understood, thanks to the enormous gaps in the sources, and it may never be possible to marry all the patterns discovered in the study of the coinage with political facts. But exploration of those patterns can only contribute to a more sophisticated understanding of the politics of the Old English kingdom.

THE DROITWICH MINT AND *BMC* TYPE XIV OF EDWARD THE CONFESSOR

B. H. I. H. STEWART AND C. E. BLUNT

THERE has recently appeared a coin of the very rare *BMC* type XIV of Edward the Confessor which we believe should be attributed to a mint at Droitwich. This significant piece throws light on a number of important aspects both of its mint and of its type. Although consideration of the two interacts at a number of points we have felt that, since the implications in each case go rather wider, it would be more convenient to discuss them in two separate but related notes.¹

An Eleventh-century Mint at Droitwich

More than seventy years ago Carlyon-Britton drew attention to the fact that eleventh-century coins were known to have been struck at mints situated in all but a very few of the composite boroughs in Domesday, and suggested that it might be worth trying to identify coins of the others.² In the case of Axbridge he correctly supposed that they might be found amongst those attributed to Axminster (?) and Exeter, but adequate evidence has hitherto been lacking to establish that coins were struck in any of the four other boroughs which he regarded as possible mints, Calne, Droitwich, Grantham, and Wimborne. More recently Professor Loyn, in observing that 'there is scarcely a single "Domesday" borough of importance in 1066 that has failed to preserve at least some coins as evidence of its activity in the late Anglo-Saxon period', remarked that 'Droitwich and perhaps Grantham seem the two conspicuous exceptions'.³ He went on to suggest that in this connection 'numismatists might well ponder' the mint-signature PICNEH on a coin of Harold II, by a moneyer Godric, from the Rotherham hoard. Professor Dolley had already doubted the attribution of this coin and before he left the British Museum had placed it beside a new ticket reading 'DROITWICH?'. Subsequently, in the Elmore-Jones sale catalogue it was suggested that lot 900, an Edward the Confessor coin of the Facing Bust type (*BMC* XIII) and with the mint-reading PICC, might be from the same mint.

The attribution of these coins to Droitwich, however, remained speculative in the absence of some evidence of localization. This has now been supplied by the new coin, which is of Godric, with a mint-signature beginning PIC— and is of *BMC* type XIV, the variant of the Confessor's last type (Pyramids; *BMC* XV), which has a facing bust instead of the usual profile. The significance of this is twofold. First, the five undoubted mints of type XIV are situated in two small areas, one in Kent (Dover

¹ For detailed comments on a draft of this paper, we are greatly indebted to Mr. F. Elmore Jones, who had himself noticed the significance of the new coin. We would also like to thank Professor Michael Dolley, Mrs. Margaret Gelling, Mr. Peter Mitchell, and Professor

Dorothy Whitelock for responding to our inquiries on various points.

² *BNJ* iii (1906), 167.

³ *Anglo-Saxon Coins*, ed. Dolley, 1951, pp. 132 and 134 (n. 23).

and Sandwich), the other in a corridor up the west side of southern England that embraces Droitwich (Cricklade, Worcester, and Tamworth). Second, amongst the type XIV coins that have been attributed to Worcester are two in the name of Heathwulf, a moneyer with clear western associations in the 1070s, whose mint-readings from the Hammer Cross type of Edward the Confessor to the Conquest prove, in fact, to be more akin to those of Godric than to the normal Worcester readings of the period.

Droitwich lies between Worcester and Tamworth and is therefore a natural candidate for coins of type XIV with a suitable mint-signature. In the eleventh century it was the centre of the salt industry in the west midlands.⁴ Its normal name was *S(e)altwic*, but in Domesday Book it is *Wich* alone, and in Saxon times it was also variously referred to as '*the Wic*', '*Wictune*', *in vico (emptorio) salis*, etc.⁵ Worcester, on the other hand, normally appears on coins of Edward the Confessor in a form of *Wihrecestre* or similar, e.g. PIHR, PIHER, PIHRA, PIHRECE, and so on. Some coins by Ægelwine of BMC type IX (Sovereign) read PIGR, representing the form *Wigra-ceastre*, but in other types he has more usual spellings. Not surprisingly, Worcester coins have often been listed as Winchester, and in some cases there is doubt between the two.⁶ But neither of these mints seems likely to have been represented by forms beginning PIC—, except perhaps by an isolated error for PINC or PIG, and any moneyer who regularly uses PIC forms was presumably striking elsewhere.

The mint-readings on coins of Godric and Heathwulf are set out below. All except the first and last coins are illustrated on Pl. III to which the numbers in brackets refer:

Edward the Confessor	Godric	Heathwulf (or -wi)
BMC type XI (Hammer Cross)		PIC ⁷
XIII (Facing Bust/Cross)	PICC ⁸ (1)	PIC ⁹ (2)
XIV (Pyramids with facing bust)	PICRIC ¹⁰ (3)	
	(OR -PIC, OR -RVF)	PL ¹¹ (4) PIEPIC ¹² (5)
Harold II	PICNEH ¹³ (6)	PIC ¹⁴ (7)
William I		
BMC type IV (Two Sceptres)		PIG ¹⁵ (8)
V (Two Stars)		HREF ¹⁶

⁴ See *VCH* i, 269–70.

⁵ *The Wic* in the will of Wulfgeat is probably Droitwich (D. Whitelock, *Anglo-Saxon Wills* (Cambridge, 1930), pp. 56–7; see also A. J. Robertson, *Anglo-Saxon Charters* (Cambridge, 1956), pp. 116–17). *Wictune*, which occurs in BCS 1282, also denotes Droitwich, according to P. H. Sawyer (*Anglo-Saxon Charters* (London, 1968), p. 250). For the phrase *in vico emptorio salis*, see T. Hearne, ed., *Hemingi Chartularium Ecclesiae Wigorniensis* (Oxford, 1723), p. 565. We are indebted to Professor Whitelock for these references.

⁶ e.g. BMC 1439 is of Worcester (as noted by Brooke in his copy of BMC) not Winchester, while BMC 1314 is apparently of Worcester, but might be Winchester. We have resisted the temptation to attribute Hildebrand 201 of Harthacnut, reading PICE, to Droitwich in view of other coins with the same moneyer's name of Harthacnut (H. 202) and Harold I (H. 1001 3) with undoubted Winchester signatures, but such a form is most unusual.

⁷ City hoard, NC 1876, p. 369.

⁸ BM ex Elmore-Jones 900; Carlyon-Britton 640 (ill.). Both are from the same pair of dies.

⁹ BMC 1486 ('Winchester').

¹⁰ Lucas lot 18 (Glendinning, 9 June 1976). The Lucas coins, mostly late Saxon and Norman, were largely drawn from the Chaneton (1866) and Shillington finds (for which see C. E. Blunt and B. H. I. H. Stewart, 'A Parcel from the Shillington (1871) Hoard?', *Num. Circ.*, Sept. 1977, p. 354).

¹¹ SCBI Norweb 217.

¹² J. J. North, *English Hammered Coinage*, vol. i, pl. XII, 26.

¹³ Ibid. 28; Dolley, *Anglo-Saxon Pennies*, 1964, fig. 48 (enlarged); BM ex Rotherham hoard (BNJ xxiii (1938–40), 273).

¹⁴ BMC 113 ('Winchester').

¹⁵ Hunterian Museum, Glasgow. We agree with Brooke's reading of the mint-signature on this coin (written on the back of the cast in BM) as PIG (cf. BMC, p. ccl). A round c is not found at this period.

¹⁶ BMC 320 (pl. XI, 15).

The persistence of the *PIC* element on four consecutive types in the 1060s, without any of the forms associated with Worcester, appears to us to constitute an overwhelming case for removing Heathewulf's pre-Conquest coins from that mint. This case is not affected by the *PIC* coin of William I's fourth issue, which must be attributed to Worcester, since there are no post-Conquest *PIC* coins known and the same name, probably indicating the same person, occurs on a coin of the next type with the reading *HREF*, which clearly denotes the not very distant mint of Hereford. Taking these points together with the geographical pattern of *BMC* type XIV of the Confessor, we are left in little doubt that the *PIC* of Heathewulf's pre-Conquest coins represents the place known in the eleventh century as *Wich* and now as Droitwich. Although assuredly of the same mint and moneyer, it is difficult to interpret the longer form *PIEPIC* made possible by shortening the moneyer's name to *HEDEWI*.¹⁷ (This itself is a curious spelling, since *-wi* would normally represent *-wig* or on coins occasionally *-wine*; it is not to be expected as an abbreviation of *-wulf*, and Professor Whitelock has suggested to us that it might result from copying *Hethew*.) The reading *PIEPIC*, however, is apparently akin to Godric's *PICRIC* (or *PICPIC*?, or *PICRVF*?) in the same type, and in spite of the curious form *PICNEH*, which is just as difficult to explain in terms of a mint name *Wich*,¹⁸ we do not think that Godric's coins can reasonably be attributed to a different mint from Heathewulf's.¹⁹

The name Godric had earlier appeared on Edward's Expanding Cross type (*BMC* V) with a clear Winchester reading,²⁰ but it is missing in the three main types which intervene between this and the *PIC* coins, and there is no reason to associate the two. Equally, the occurrence of a Godric in *BMC* type XIV at Sandwich also can be regarded as no more than coincidence. Godric was at this period an extremely common name, but it is perhaps worth remarking that Domesday is full of references to land in Worcestershire belonging to Godric, thegn of King Edward.

It is clear that Droitwich possessed considerable local importance as a result of its saltworks in the mid eleventh century, and it is quite possible that its activities as a mint are by no means fully represented by the few coins so far recorded. Its earliest identified coin is of the same issue as the unique coin from the other small mint in the county, Pershore.²¹ Otherwise, the dominance of the county mint of Worcester seems to have been as great as that of Gloucester, and suggests administration of a quite different kind from that of the West Saxon counties of Somerset and Wiltshire to the south, where coinage was much more often produced at smaller, local mints.²²

¹⁷ *BMC* 113 of Harold reads *HEDEPI* and *BMC* 320 of William, *HEDEPI*. The Hunterian coin of Worcester reads *HEDEPVLF*.

¹⁸ Regarding the longer forms, Dr. Gelling has suggested to us (letter 28.8.76) that the die-sinker might have been 'dissatisfied with the undistinguished name *wic*' and have tried to make it more distinctive by doubling or amplifying it. Professor Whitelock (letter 20.8.76) wonders if *PIEPIC* might possibly be a corrupt form of the *Wic*. Both these ideas are, of course, admittedly speculative.

¹⁹ Carlyon-Britton attributed his coin of Godric to

Watchet. No coins of that mint have been identified between *BMC* type VII (Helmet) of Edward and *BMC* type VI (Sword) of William I, when the moneyer is Sigolf, whose coins of this and later types read *PICDE*, *PICED[il]*, and *PIC[il]* (M. A. S. Blackburn, 'The Mint of Watchet', *BNJ* xlv (1974), 13-38; note Dr. Gelling's comments on the abnormality of the *Wic*-spelling, p. 37).

²⁰ *PINC*, City hoard, *NC* 1876, p. 371.

²¹ Lockett 847 (*BNJ* vi. 35). The coin is on a typically small west midlands flan.

²² There are several other *WIC*s in western Mercia, for example, Middlewich, Nantwich, and Northwich. It has

BMC type XIV of Edward the Confessor

BMC XIV is an extremely rare type. In BMC itself there is one specimen only (no. 157). Six were noted in 1905 by Carlyon-Britton,²³ while Elmore-Jones was able to add four more in 1957.²⁴ The total can now be increased to fourteen, of six mints and from ten or eleven pairs of dies, which we now list, with some additional information. Die-duplicates are listed under the same number.

1. Cricklade, Leofred.
LEOFRED ON CRECLA. Same rev. die as BMC 158 (type XV). BMC 157, ex Chancton hoard (NC 1867); North, *English Hammered Coinage*, vol. i, pl. XII, p. 25.
2. Dover, Manwine.
MANPINE ON DOPER. Same rev. die as BMC 193 (type XV).
(a) Ashmolean Museum (SCBI 1062), ex Lockett 857 with pedigree going back to Brice. Ruding, pl. 25, 25 (then *Rebello*) is probably this coin; the Dymock manuscript adds above 'Rebello', 'Bluett' of which the meaning is not clear.
(b) Carlyon-Britton 643 (ill.), later Mann sale lot 177. No pedigree but probably the specimen recorded as being in the City hoard (NC 1876).
3. Droitwich, Godric.
GODRIC ON PICIE (or -PIC, or -RVF?). Glendining, 9 June 1976, lot 18 (ill.); see note 10.
4. —, Heathewulf.
HEADEPVLF ON PI. SCBI Norweb 217, with pedigree going back to Martin, 1859.
5. —, —.
HEDEPI ON PIEPIC. J. J. North (ill. op. cit., pl. XII, 26), ex Argyll and with pedigree probably going back to Bearman (in 1905).
6. Sandwich, Godric.
GODRIC ON SANDPI. City hoard (NC 1876, p. 362), present whereabouts unknown. Moneyer otherwise recorded for this mint only in BMC type XIII (BM ex Taffs 104).
7. Tamworth, Bruning.
BRVNING ON TAM.
(a) Birmingham Museum, SCBI Midlands 484, ex Staunton, 1875.
(b) Tamworth Castle, SCBI Midlands 485, with pedigree back to Bearman (in 1905).
(c) Elmore-Jones sale, lot 811 (ill.).
8. Worcester, Æglwine.
IEGLPINE ON PIHRIC (or -RE?). *Num. Circ.*, Apr. 1957, col. 157 (ill.), no pedigree.
9. —, Ælfgeard.
IELFGEARD ON PH. Drabble 889 (ill.), ex Ready (1920) 183; later A. E. Bagnall. (Formerly attributed to Winchester: see *BNJ* xxvii, 373.)
10. —, —.
—EARD ON PN. Dymock MS, c. 1850 (Rev. T. F. Dymock, then in his collection, from which there were several sales, the final one in 1858, after his death: it is not identifiable in any of these); perhaps a fragment; not traced. (Possibly from the same dies as no. 9, since H and N are sometimes confused.)
11. —, Wicinc.
PICINE ON PIREC. Guildhall Museum, ex City hoard (*Num. Circ.*, Apr. 1957, col. 158).

been suggested to us that Nantwich might have been a borough at this period, but we have found no evidence of this. Even if it were, Droitwich is, in our view, numismatically preferable to Nantwich. All three places may, we consider, safely be ignored in the context of these coins.

²³ P. Carlyon-Britton, 'Edward the Confessor and his Coins', NC 1905, pp. 179–205.

²⁴ F. Elmore-Jones, 'An Unpublished Penny of Edward the Confessor', *Num. Circ.*, Apr. 1957, cols. 157–60.

The attribution of nos. 3–5 to Droitwich reduces the number of Worcester moneyers to three, Æglwine, Ælfgeard, and Wicinc. The first and last of these are well-attested names at Worcester at this period, but Ælfgeard does not otherwise appear before the Conquest. His coins of type XIV, reading PH or PN, had previously been attributed to Winchester, but Elmore-Jones pointed out that the name Ælfgeard, not otherwise recorded at Winchester, occurred at Worcester under William I and II.²⁵ Ælfgeard's post-Conquest types run from *BMC* IV (Two Sceptres) of William I to the last type of William II, *BMC* V, which cannot have started more than two or three years before 1100. Even though *BMC* type XIV may have been struck at Worcester up to Edward's death, the span of time between this and the last occurrence of Ælfgeard is more than thirty years, with Harold II and the first three post-Conquest types missing. Although not impossible, this would be a long career for one man and needs to be considered critically in view of the doubtful mint-signature. There are, however, comparable cases at other mints of the same name appearing more or less continuously for fifteen or twenty types at this period—Sæwine at Exeter and Winraed at Lewes, for example—and a gap between Edward's last issue and *BMC* IV of William I is not unusual since the intervening types are quite rare. To this argument in favour of the Worcester attribution two others may be added. First, accumulating evidence emphasizes the special associations of *BMC* type XIV with minor mints and in particular with Worcestershire—half of the known coins and more than half of the known moneyers; of Winchester, on the other hand, indeed of any mint in that region and of any of the principal mints throughout the country, no specimen of the type is recorded.²⁶ Second, the name Ælfgeard was not a common one and its only certain occurrence at this period is in a Worcestershire context—Eadgyth, daughter of Godwine and Edward's queen, had a foreign waiting-woman, who married a rich man in Worcestershire, Ælfgeardus.²⁷

BMC XIV differs from the substantive Pyramids type (*BMC* XV) only in the bust being shown facing and not in profile; the bust itself, crown, trefoil pendants, drapery, sceptre, are all as nearly equivalent on the two types as they can be, given the different angle. The reverses are identical, as Hildebrand recognized in calling the normal Pyramids coins type I and *BMC* XIV, type Ia; indeed there are die-links between XIV and XV in the case of the only two moneyers, Manwine of Dover and Leofred of Cricklade, who are known for both types. Type XIV was described by Carlyon-Britton as a kind of mule of types XIII and XV, but has been more usually regarded by others as transitional between the two.²⁸ Carlyon-Britton, who did not know of the unique real type XIII/XV mule (by Ægelwine of Leicester)²⁹, developed an elaborate theory about the types of Edward the Confessor in which he argued that mules with an obverse of the preceding type were struck for a few months at the start of each new issue—the “artificial” mules with full face resembling Type X [= *BMC* type xiii] and the reverse of Type XI [= *BMC* type xv] present the strongest argument in favour of this theory, as in those instances new obverse dies had to be

²⁵ *BNJ* xxvii. 373.

²⁶ The entry for London on p. 340 of the City hoard report. *NC* 1876, is not corroborated by any of the other tables and is presumably an error.

²⁷ E. A. Freeman, *The History of the Norman Conquest of England*, 3rd edn. (1877), p. 46 n., citing Worcester

Cartulary, 253.

²⁸ North, *op. cit.*, p. 131; Elmore-Jones, *Num. Circ.* 1957, col. 158.

²⁹ Guildhall Museum, ex City hoard 1872; Elmore-Jones, *loc. cit.*, col. 160.

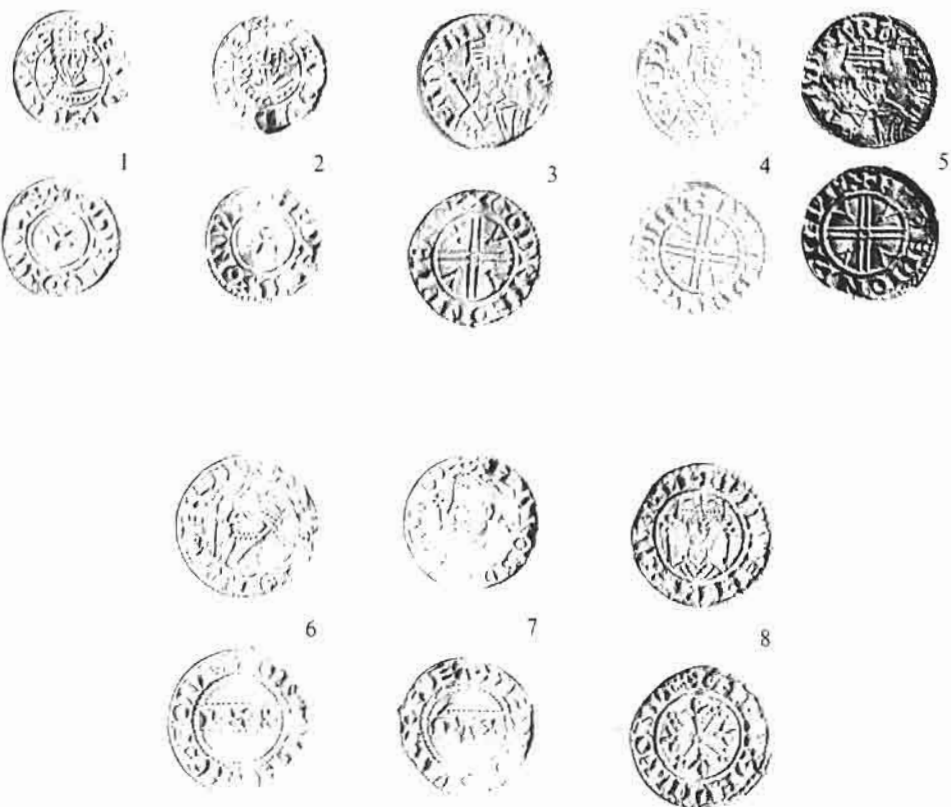
specially engraved' and 'the increased size of the flans of Type XI, as compared with Type X, permitted a fuller representation of the obverse of that type'.³⁰

While Carlyon-Britton's idea clearly cannot be taken seriously, we also doubt whether it is quite right to regard type XIV as transitional. As Elmore-Jones remarked, no type XV coins are known of Worcester, and although it is a relatively rare type and the mint is a generally rare one too, this absence contrasts with the comparative abundance (three moneyers and four coins) of type XIV. Elmore-Jones concluded that 'Worcester must have continued to use these dies long after other mints had gone over to the profile portrait of the substantive type.' We can now suggest that the same may have applied to the second Worcestershire mint, Droitwich, of which we have three coins by two moneyers of type XIV but nothing so far of type XV. Both mints are known under Harold II and it therefore seems quite likely that in Worcestershire type XIV continued in issue (to the extent that such small mints were active at all after the early stages of the Pyramids type) until Edward's death. Since they account for seven out of fourteen known coins of the type, *BMC* XIV would perhaps be more fairly described as a localized variant of Pyramids than as a 'short-lived transitional issue'. A century ago Willett suggested that the type may have been simultaneous with the substantive Pyramids and that the engraver, accustomed to draw the facing bust of *BMC* type XIII 'altered his type to suit the new coinage, but retained the full-faced bust'.³¹ Quite what happened we cannot tell, but the concentration of type XIV at minor mints in two peripheral areas suggests the almost immediate withdrawal of new dies because the type was thought to be unsatisfactory. The reason may well have lain in the superficial similarity between the obverse of type XIV and of type XIII which it was designed to replace. Although the difference between successive obverse types in the 1030s and 1040s had become rather less clear-cut, a conscious attempt seems to have been made in the 1050s (and after the Conquest) to make each new type readily distinguishable from its predecessor by obverse as well as reverse, and the innovative Sovereign and Facing Bust types may have resulted from such a policy.

We do not know how many mints may have received obverse dies of the second consecutive type with a facing bust, and other mints of type XIV may await discovery. But clearly in most cases, certainly so far as the principal mints were concerned, type XIV dies either never reached them or were replaced, before they could be used, by the new design of type XV which would be less confusing to the eye for the purposes of recoinage. The circumstances of issue and nearly total withdrawal (or of replacement before issue except in a few insignificant cases) are apparently comparable to those of the Agnus Dei type of Æthelred II which is confined to lesser mints in the midlands. But the reasons for aborting the two types were presumably different, and type XIV continued to play a small and isolated part in the Pyramids issue as a whole. While, therefore, the type XIV dies must have been made and issued at the beginning of the Pyramids issue, and their design is indeed transitional between those of types XIII and XV, we feel that it would be misleading chronologically to regard the coins themselves as transitional between the two issues since some of them at least could have been struck as late as any of the type XV coins at other mints.

³⁰ Carlyon-Britton, *op. cit.* 196 and 204.

³¹ *NC* 1876, p. 336; however, he did not know of the *BMC* type XV coins of Dover, Cricklade, and Sandwich.



STEWART AND BLUNT: DROITWICH

A RE-EXAMINATION OF SOME HOARDS CONTAINING COINS OF STEPHEN¹

R. J. SEAMAN

IN the *British Numismatic Journal* for 1968,² Mr. E. W. Danson made a very noteworthy attempt at reconstructing the Nottingham hoard of coins of Stephen, discovered in January 1880. The hoard was first reported upon in 1881, but only twelve coins were listed out of a total of 177 included by Danson, to which I can add just one piece, albeit an important one. The reports of hoards containing coins of Stephen vary in reliability and some were not published until many years after the discovery. Despite assurances by the writers of the reports that the finds were intact, it is for consideration that some error or omission has occurred, unbeknown to the reporter and, more important, there may have been the odd coin added to the hoard just because it happened to be around and was from approximately the same period. There is evidence for this in the reports on the medieval coins found at Dunwich.³

Estimating the date of deposition of hoards of this period has been a difficult task. Most of the larger hoards, which have sufficient coins on which to base a reasonable conclusion, were published in the last century, since which time research has produced different suggestions as to the dates of emission of both the regular and certain irregular coins of Stephen's reign. Excluding the recent find at Prestwich,⁴ which has yet to be fully published, there are ten hoards which are known to have contained fifty or more coins of the reign.

<i>Name of hoard</i>	<i>Date found</i>	<i>Publication and contents</i>	<i>Suggested date of deposition</i>
Ashby-de-la-Zouch	1788/9	<i>BNJ</i> 1968. Said to contain over 400 coins of Henry I and Stephen, of which 9 only are described.	Not given
Awbridge	1902	<i>NC</i> 1905. Said to contain about 180 coins of Stephen and Henry II; 34 of Stephen and 104 of Henry II are listed.	1180
Dartford	1817 or 1825/6	<i>NC</i> 1851: said to contain about 65 pennies of Henry I and Stephen, of which 4 of the former king and 55 of the latter are listed. In <i>BNJ</i> 1968, another 4 pieces of Stephen are attributed to the find.	c. 1150

¹ I am indebted to several members of the Society for valuable assistance so willingly given to me. In particular, I wish to thank Mr. Ian Stewart, M.P., without whom the paper would not have been published. I wish also to thank Professor R. H. C. Davis for the advice given to me on the history of the period, although responsibility for any errors which may have occurred in the interpretation of this advice must rest with me.

² *BNJ* xxxvii, 'The Nottingham Find of 1880: A Stephen Hoard Re-examined', pp. 43-64, and plate.

³ *BNJ* xli, 'A Further Find of Coins from Dunwich', pp. 27-33; and *BNJ* v, 'Finds of Mediaeval Cut Halfpence and Farthings at Dunwich', p. 126.

⁴ Coin Hoards I (Royal Numismatic Society, 1975), no. 360. Full report yet to be published.

<i>Name of hoard</i>	<i>Date found</i>	<i>Publication and contents</i>	<i>Suggested date of deposition</i>
Latton	Between 1860 and 1900	<i>Wiltshire Archaeological Magazine</i> , 1911 and 1969; between 50 and 200 coins of Henry I and Stephen thought to be in the hoard, of which 1 of Henry I and 2 of Stephen are listed in the later volume.	c. 1145
Linton	1883	<i>NC</i> 1883: thought to contain about 150 coins of Henry I and Stephen, of which 7 of Henry I and 82 of Stephen are listed.	1140/2
Norfolk	Dec. 1660	<i>BNJ</i> 1968: stated to contain at least 60 coins of Stephen but none listed.	Not given
Nottingham	Jan. 1880	<i>NC</i> 1881: thought to contain over 150 coins of Henry I and Stephen, of which 2 of Henry I are described and another 7 mentioned. 10 of Stephen are listed and all 12 listed pieces are illustrated. <i>BNJ</i> 1968, contains a relisting of the hoard and describes 14 coins of Henry I and 163 of Stephen, to which another one of the latter king is now added (see below).	c. 1141
Sheldon	1867	<i>BNJ</i> 1910, carefully lists 3 coins of Henry I and 98 of Stephen, almost certainly the entire hoard.	c. 1142
South Kyme	Long before 1922	<i>NC</i> 1922: 334 coins carefully listed. Although the discovery is thought to have occurred many years earlier, it is probable that the hoard was intact at the time of the report.	1141+
Watford no. 1	1818	<i>NC</i> 1849: 1,127 coins examined, of William II (1), Henry I (477), and Stephen (649). Despite a number of rumours and the interval of 30 years since the discovery, it was considered that the hoard was probably complete. 779 coins were listed.	c. 1140

From the list of finds, it can be seen that six were published many years after discovery and the same probably applies to South Kyme. In spite of the fact that all these coins are available and known to have come from particular hoards, one still hears the comment 'if only we had a really big hoard from Stephen's time'. This is because, notwithstanding the hoards published to date, there still exist a number of problems and it is to be hoped that the recent find at Prestwich will provide answers to at least some of them.

Two questions which need to be considered further are, when did type I cease to be struck? and why does only the Linton hoard contain a representative number of both types I and II? It is proposed to comment on these two problems later; for the present, however, and in an attempt to reassess the dates of deposit of these hoards, a critical examination has been made of just five of them, namely those discovered at Linton, Nottingham, Sheldon, South Kyme, and Watford (no. 1). The research has taken the form of a close look at the regular coins of *BMC* I, divided into the various obverse inscriptions; a check to see whether coins which are of prime importance in the dating exercise really did form part of the hoard, as well as an examination of the dates for the issue and currency of *BMC* types I and II.

Inscriptions

The obverse inscription of the first type of Stephen's coinage, barring a very few exceptions, falls into four styles, namely:

STIFNE REX (or occasionally STIEFNE REX)
STIEFNE RE
STIEFNE R
STIEFNE

A paper was read to the British Numismatic Society in 1972,⁵ although it did not appear in print, which attempted to demonstrate that the earliest of these inscriptions is that reading STIFNE REX and the supporting evidence for this suggestion takes two forms. Firstly, coins with this reading are of neater style and this is to be expected for the first issue of a king who, although he had a claim to the throne, was not clearly the first choice to succeed. The inclusion of the full title REX undoubtedly was used as one of the few ways to tell the inhabitants of this country that Stephen was the king. There is also supporting evidence on the coins from Lincoln mint, in so far as the spelling of the mint name is concerned. In the reign of Henry I, the mint is shown as NICOL, and this spelling also occurs on the coins reading STIFNE REX. However, the coins with the legend of just STIEFNE in larger lettering and often without an inner circle, have the mint shown as LINCOLNE, or a shortened form thereof. Later issues from Lincoln, including types IV and VII of Stephen, also have the spelling LINCOLNE. It would appear to follow that the coins with no title at all are the last of the type and, if further evidence is needed here, then this perhaps lies in the fact that, with a single exception, *BMC* II coins all have the obverse legend reading STIEFNE. As far as can be ascertained, all coins of types VI and VII have just the king's name on the obverse, although it is interesting to note that the other *BMC* types, III, IV, and V, include STIEFNE R amongst the specimens recorded. This situation calls for more research, as it may add weight to the suggestion that type VI followed type II.⁶

In addition to examining the various obverse legends of type I pennies contained in the five hoards mentioned above, I have also considered the weights of the coins, separately for each spelling.⁷ It would appear that some conclusions may be reached from this examination but, as one would expect with these particular coins, the result is not entirely conclusive. However, the findings are as follows:

Watford no. 1

A comparison of the regular coins of *BMC* type I from Watford shows that this hoard was probably concealed earlier than either South Kyme, Sheldon, or Nottingham. It is a pity that the weights were not given in the original report of the hoard, for the coins were presumably weighed, as Mr. Rashleigh mentions that 'the average weight of many of the worst preserved of these coins was 20 $\frac{3}{4}$ grains . . . but ten of the

⁵ R. Seaman at the October meeting of that year. See also M. Dolley and K. A. Goddard, 'The Anglo-Norman Spellings "Stifne", "Stefne" and "Stiefne" Found on the obverse legends of English Coins of Stephen's first Substantive Type', *Proceedings of the Royal Irish Academy*, 1971, pp. 19-34, which discuss the obverse legend, but the

major part of the paper is concerned with the Anglo-Norman origins.

⁶ R. P. Mack, 'Stephen and the Anarchy 1135-1154', *BNJ* xxxv, p. 56.

⁷ Dolley and Goddard, *op. cit.*, includes a similar exercise on coins from the Watford hoard only.

best struck coins averaged more than $22\frac{3}{4}$ grains, or about a $\frac{1}{4}$ grain above the proper weight'.⁸

For the purpose of this exercise, the coins from Watford currently in the British Museum's trays have been included but, as with the other hoards, specimens on which the obverse reading is in doubt have been omitted. This means that some sixty-eight coins only out of a total of over 600 have been used. This is unfortunate but, nevertheless, an interesting picture emerges, as with the other hoards, of a slight but gradual reduction of weight. The average weights in this hoard are for REX—21.7; RE—21.2; R—21.1, and no title at all 21.5. It should be remembered that as the coins with the clear readings only have been taken into account, the weights recorded are from the better-preserved specimens. Although mention needs to be made of this point, on the other hand it will be seen from Rashleigh's report that the very worst specimens were, on average, not much lighter than the superior specimens.⁹

There were a number of irregular pieces in the hoard. These comprised two coins reading PERERIC, one erased die, one coin with a mint reading ETB (and another of similar style), and a penny listed as of Matilda. The coins reading ETB, although somewhat light, appear to fall into the category of blundered pieces and do not seem to be any more significant. Another coin with a blundered legend, listed by Rashleigh when reporting the find, appeared as number 15 and was later in his Sale. The obverse legend had been read as —RCEX and it was suggested that it should have been EREX, but the letters that remain could be construed as being RCC + L. The suggested reading of the reverse was given as —TE or TZ and an attribution to the mint of Thetford cannot be confirmed. The weight of this piece is 18 gr. Number 16 in the original list has no legend, but with a weight of 19.4 gr. does not seem to be a baronial piece. The remaining coin listed, number 17, seems to be a coin from the London mint and weighs 21.5 gr.

The coin attributed to Matilda is now regarded as doubtful¹⁰ and, as such, cannot be relied upon as occupying the position of being the latest coin in the Watford hoard. The only other irregular coin listed in the *Numismatic Chronicle* is given to Henry of Anjou, but it has a most indistinct legend and is of very rough workmanship. Therefore, the attribution is again doubtful and cannot be taken as reliable in relation to the dating exercise.

South Kyme

The chart suggests that the South Kyme hoard was concealed a number of years after 1135, but unlike the Nottingham hoard, discussed later, there is a high proportion of coins reading REX and RE. This produces two thoughts; the first being the suggestion that the Nottingham hoard was formed fairly hurriedly, whereas the South Kyme parcel is made up of coins which had been put by on a regular basis over five years or more. The other thought is that the coins from South Kyme still show a pattern of a reduction in the average weight during issue, although there is one specimen without any form of title weighing 23 gr. The average weights are for REX—21.4; RE—20.6; R—20.2, and for no title at all 19.6.

⁸ J. Rashleigh, *NC*, 1st ser., xii, p. 163. ⁹ *Ibid.*, p. 149.

¹⁰ *BNJ* xlv, 'A London Penny of Matilda', by Jan Stewart, links the Watford coin with one then owned by

Mr. Tasker. The latter piece has been declared not to be a coin of Matilda but possibly struck from a die originally prepared for the empress and altered before use.

Sheldon

This hoard has been included because, as far as can be ascertained, it was complete when recorded and, with possibly one or two exceptions, is still intact at Chatsworth House. There are more coins with no title than of the other varieties and the ranges of the weights follow the same pattern. The average weights are REX—20·3; RE—20·2; R—20·4, and with no title 19·4. What are probably the latest coins in the hoard are those in the name of Matilda, and two examples which appear to be mules of the first two regal issues. The former coins are very unusual in style and have a facing bust, which is otherwise unknown for the empress. They are not generally accepted as being genuine coins of Matilda. The latter coins are also rough in style and are likely to be forgeries. Nevertheless, the hoard was presumably buried during the currency of type II and, as there were no actual coins of this type, it may be assumed that concealment was at the beginning of the second regal issue.

Nottingham

Danson includes a total of 177 coins in his relisting and, for the record, two observations should be made. Firstly, coin number 18 is, with little doubt, from the Durham mint, and the question-mark may be removed. Danson was right in questioning this piece, as it has had a chequered past. It was first listed as being from the London mint in Montagu's sale.¹¹ Then, although the correct mint was arrived at, the published reading was false. The letters which were stated to be legible were shown as making up +HE[NRI] ON D[.].N, whereas the coin actually reads [+HE]NRI [ON] DVN. This piece passed through the collections of R. C. Lockett and N. C. Ballingal and is now in the writer's cabinet. The other observation to be made is in the form of an addition to Danson's listing. The piece is the coin from Winchester mint with the obverse reading PERERIC. This coin is also in the present writer's collection, with all the earlier tickets, showing that it came from the Nottingham hoard, Toplis (not in Sale), Roth I (lot 145) and Drabble I (lot 723) collections. This coin does not appear to have been in the collection of Montagu and this is probably the reason why it was not included in the relisting; for, without the accompanying roundels, Danson could not have connected the coin with the Nottingham hoard.

Of the coins contained in the relisting, I have used eighty-nine specimens of *BMC* type I for the purpose of analysis. Pieces which are broken or on which the legend is not entirely clear have been omitted but there have been included those of the erased-die variety which can be read. This is because these coins make up a significant part of the first issue, but their weights are discussed separately below. The coins reading REX appear generally to have been issued at full weight. Some wear would naturally have taken place, particularly during an issue which lasted considerably longer than normal and one might also expect a slight reduction in the weight of issue. This appears to have happened. However, the average weight of the coins with this reading contained in all the hoards under examination, except Linton,¹² is not far below the full weight, indicating that the effect on the weight as a result of circulation is not very great. Why a few coins of considerably light weight should exist with the king's name,

¹¹ H. Montagu Sale, Sotheby & Co. Part V, 1897, lot 118.

¹² The Linton pieces are lower than the others but this

hoard would have been concealed as much as fifteen years after the issue of the first style of *BMC* 1.

when the general standard is good, is difficult to explain, and it may well be that they are, in fact, some of the pieces supposed to have been issued in vast quantities by barons, many of whom would probably not go so far as to put their names on the coins.¹³ It is interesting to note again that, with those very few exceptions, light coins are not generally found amongst those with the inscription REX.

As will be seen from the accompanying chart, the REX and RE pennies had disappeared almost entirely when the Nottingham hoard was concealed, but the weights of the surviving coins with this inscription are good and it could be that many of the REX coins had become light through years of circulation and those particular specimens were not chosen by the hoarder. The absence of REX specimens and the large proportion of coins with no title may well indicate that the Nottingham hoard was concealed at the end of the currency of the first type of Stephen but before the circulation of *BMC* type II.

If it is accepted that the coins reading STIEFNE were the last of type I, then the chart shows that they were issued at a lower average weight. There are still some coins which nearly reach the full weight but there are also coins of virtually every weight within the range, the average weight being 16.9 gr. As a fair proportion of the coins with no title are light, and it is not just a case of the isolated piece, it seems that the low average to be found in the Nottingham hoard is more the result of lightweight issue than of being in circulation.

Of the irregular coins in this hoard, there was a high proportion of the erased-die variety, namely forty-one. As mentioned earlier, those with a clear obverse legend have been included in the chart. It appears to be a fact that all the coins with erasures of some kind are with the legend STIEFNE R or STIEFNE, although coins from eastern mints with roundels are recorded from dies having REX and RE. The weights of the erased-die coins vary between 13.9 and 19.5 gr. The two heaviest coins are from Lincoln mint with only the slightest form of erasure (Mack numbers 150(a) and (c)) and, if they are omitted, the heaviest coin reaches only 17.4 gr. The other irregular pieces are two coins reading PERERIC, five with roundels and fifteen coins which appear to be from local dies. There is also a coin in the name of Matilda and another in the name of Henry of Anjou. These two coins both imitate *BMC* type I and assist considerably in determining the earliest date of deposition. But what would undoubtedly be the latest coin in the hoard is the single example of *BMC* type VI. This piece is number 107 in Danson's list and seems to be out of place in the hoard. This view is expressed by Danson and, although the coin has a provenance similar to many of the coins which can be traced to the Nottingham hoard with certainty, it seems that there is sufficient doubt as to remove it from the list.

Linton

This hoard was included because of its unique position of combining a good representation of coins of *BMC* type II with coins of the first issue. The only other hoard to contain type II coins was Winterslow,¹⁴ with just five, although Dartford may have contained some and Sheldon had two contemporary forgeries of the type. Linton may, therefore, be presumed to have been concealed at a time when the first type had ceased

¹³ Mack, *op. cit.*, p. 64.

¹⁴ Mack, *op. cit.*, p. 102.

to be struck, although still generally current. The report of the Linton hoard is not very accurate in that a number of pieces were misread. Also, some eighty coins were not listed and there is a noticeable absence of irregular issues, other than the type of the moneyer SANSON.

The Linton hoard needs relisting and this task is presently being undertaken by the writer of this paper. However, for the purposes of this exercise, the published report will suffice. It can safely be assumed, if indeed anything can be with coins of this reign, that the hoard was put down after the issue of *BMC* type I had ceased to be struck. Therefore, it is suggested that one might look at this hoard to prove, or disprove, the suggestions that have been made earlier. In fact, the statistics do not disprove the suggestions. There are fewer coins reading REX, RE and R; only fourteen of all three subtypes. Specimens with no title number thirteen alone, including a cut halfpenny, but there were a high proportion of coins on which the obverse legend could not be read. As will be seen from the chart, the weight progression is again similar; the average weights being REX 19.9, RE 20.8, R 19.9, and with no title 19.2.

The hoard had more coins reading REX and RE than those reading R. But the owner of the coins seems to have been selective. This could be the reason why there are no baronial pieces listed, although it is an interesting fact that the finds from Kent and Hertfordshire, whilst containing Angevin pieces in some cases, did not have any coins in the names of barons. Perhaps this is an indication that baronial pieces did not circulate in south-east England. We are assured by Wakeford, who wrote the report of the Linton hoard in 1883, that although not all types were acquired by him, he carefully examined and recorded all varieties in the hoard.¹⁵ There is no real reason to doubt this statement and the absence of irregular pieces is accepted.

An interesting feature of this hoard is the unusually high proportion of cut pieces. There were no fewer than 24 halves and quarters out of a total of 88 pieces, suggesting a parcel of current cash rather than savings. Of the 39 specimens of type II, 14 were cut pieces. This proportion appears to be about the same for all the type II specimens recorded and leads one to the conclusion that the majority of the examples of this quite rare type came from the Linton hoard.

This hoard contained just three irregular pieces. There were two coins with the legend PERERIC and one reading SANSON ON ANT. There seems little doubt that the *BMC* type II coins are the latest in the hoard and, as there is an even balance between *BMC* types I and II, it is probable that the Linton hoard was concealed early during the emission of type II.

Dating for BMC type I

The period of issue for this type most commonly quoted is *c.* 1135 to *c.* 1141.¹⁶ There are, however, several reasons for questioning the later date. Firstly, there were only four, and possibly three, distinctive issues during Stephen's reign; namely *BMC* types I, II, VI, and VII or I, II/VI, and VII. So, there is a need to distribute three or four main types amongst the nineteen years of the reign. Secondly, there is some evidence afforded to us by the coins in the names of Matilda and Henry of Anjou, which imi-

¹⁵ G. Wakeford, *NC*, 3rd ser., iii. 108.

¹⁶ But see M. Dolley, 'The Anglo-Norman Coins in the Uppsala University Cabinet', *BNJ* xxxvii. p. 34, where the

suggestion is made that the first type may have continued in general circulation (and in issue) until the 'beginning of the late 1140's'.

tate regal issues. Matilda came to England late in 1139, and coins in her name could have been issued then. It is more likely, however, that the few specimens issued in her name were struck in 1141 when she was in a much stronger position, with Stephen in prison and her coronation in sight.

It is almost as likely that the coins could have been issued in the following year. Mack¹⁷ records that Matilda took no further part in the war after December 1142 and that, for the next five years, her brother Robert of Gloucester carried on the battle on behalf of her son Henry. It should be remembered, however, that Matilda remained in England, in the Bristol area, until January 1148, when she returned to Normandy, following the death of Earl Robert in October 1147. It seems less likely that coins would have been struck in Matilda's name in the late 1140s, although she did grant the earldom of Salisbury to Patrick in 1147, indicating that she was not entirely inactive. On balance, however, the period 1141/2 is most likely for coins in the name of Matilda, all of which are in the style of *BMC* type I and light in weight.

Henry of Anjou was born in 1133 and his first visit to England was in 1142, when he was nine years of age. He made a further visit in 1147, supported by a small army, and returned again in 1149, by which time Matilda had left for good. It seems reasonable to dismiss the issue of coins in the name of Henry as being connected with his visits of 1142 and also 1147, for the reason that Matilda was still here, and bearing in mind his age. The year 1149 is a possibility but, from a historical point of view only, the balance is in favour of 1151. This last date presents problems, in that the majority of the pieces in the name of Henry of Anjou resemble *BMC* type I.¹⁸ The remainder have a facing bust which, at first inspection, appears to imitate type II but which are, in fact, probably copied from a coin of the fifth issue of William I. One must ask why a coin was chosen which had not been in general circulation for more than seventy years? It is possible that dies were produced on the Continent from a single specimen picked by pure chance. Or was it that type II, which was issued from eastern mints in England, did not circulate in the western part of the country? Whatever the answer, it remains a fact that there are thirty or so coins recorded today; some being good copies of Stephen's first issue (either on both sides or at least on the obverse), whilst the remainder have a facing bust as do Stephen's second issue.

However, one must not overlook the evidence of the coins themselves. The outstanding feature comes to light by comparing the mints. Matilda's identifiable places are Bristol, Oxford, and Wareham, whilst Henry's are Bristol, Gloucester, Hereford, and Malmesbury. Therefore the only mint which is clearly seen to have produced coins for both is Bristol and there a moneyer named ARFENI or ARFIN worked for Matilda and Henry. It is suggested that this moneyer was employed firstly for Matilda and afterwards for Henry for the reason that the coins in the name of Henry are the facing-bust type, which is assumed to be the later emission. Notwithstanding the preference historically for 1151 as the date for coins in the name of Henry, one cannot but postulate the earlier date of 1149 by noting that two separate areas were involved, for by this year Matilda had left England for good. If Henry's coins were struck in 1149, perhaps the issue was organized by William, the new earl of Gloucester and it may be just coincidence that, for Henry's profile type, three moneyers at least are known to

¹⁷ *Ibid.*, p. 86.

¹⁸ But see below for a more detailed description of the profile coins of Henry of Anjou.

have been working at the Gloucester mint. However, the earlier date is not very likely but, in the absence of positive information, the possibility should be recorded.

As there is no positive evidence to support dating of the coins in the names of Matilda and Henry, the following dates are only conclusions based on the arguments put forward in this paper.

Matilda	Coins in the style of Stephen's first issue (Mack numbers 230 to 240)	1141/2 or possibly 1147
Henry of Anjou	Coins imitating Stephen's first issue entirely (Mack numbers 241 to 245)	1151 or possibly 1149
	Coins with obverse in the style of Stephen's first issue but with reverse similar to Henry I's last type (Mack numbers 247 to 253)	1151
	Coins with facing bust in style of William I's fifth type (Mack numbers 255 to 261)	1152

It is suggested that these lightweight coins, all of which average about 15 to 16 gr., were put into circulation at a time when they resembled the type of regal issue most commonly, if not solely, in use. This would indicate that *BMC* type I was still circulating in 1150, and suggests that in the western part of England there might have been a shortage of coins, causing the later issues of the Angevin party to look only vaguely like Stephen's types.

A considerable extension of the period of currency of *BMC* type I would fit in with the rarity of the other main types, and the fact that most hoards are limited to the first of the official issues. The revised dates of *circulation* now suggested are:

<i>BMC</i> type	<i>Western England</i>	<i>Eastern England</i>
I	1135 to c. 1152	1135 to c. 1150
II	Did not circulate?	c. 1150 to c. 1152
VI	Did not circulate?	c. 1153
VII	c. 1153 to c. 1158	c. 1153 to c. 1158

It is interesting to note that in the five hoards used for this paper, no coins were found from either Bristol or Gloucester mints with the obverse inscription *STIEFNE*. This could be taken to mean that the coins with this inscription were struck after 1146 in other areas, and that these mints at least were, by that time, not working at all for the king. If coins of Bristol and Gloucester mints with this obverse reading exist at all, they are very rare and the only specimen noted is by the moneyer *GURDAN* of Bristol and the final part of the legend is indistinct, so that it cannot be said with certainty that the reading is the latest variety. Although a number of coins of Stephen's first issue from these mints were included in four of the hoards, it is worthy of note that the Nottingham hoard contained none from either place.

Mack¹⁹ suggests the year 1153 for the commencement of type VII and also puts forward the theory that types II and VI might have been concurrent, using as his argument a unique type II/VII transitional piece. Although the evidence produced by this particular coin should not be dismissed without due consideration, there remains the fact that all eight mints known to have struck coins of type VI are recorded for type II. So the suggestion that the two types were concurrent seems unlikely.

¹⁹ Ibid., p. 55; see also *BN*/ xxviii 'Stephen Type VII' by F. Elmore-Jones, for a detailed study of the type.

Dating of the hoards

In addition to looking at the coins of Matilda and Henry of Anjou for dating purposes, there are two other facts which are of some assistance in dating the hoards. Firstly, there is the content of the hoards which comprises coins from other reigns. In Watford, coins of Henry I and Stephen were represented in a ratio of 2:3; South Kyme had a ratio of about 1:30 for the same kings; Sheldon had a similar allocation; Nottingham contained coins of both Henry I and Stephen with a ratio of about 1:12, whilst Linton, although still containing some coins of Henry I, had a majority of Stephen's second issue.

Secondly, some evidence may be afforded by the coins of the London mint by the moneyer Robert. This moneyer started work at the mint late in the issue of *BMC* type I. The name also appears frequently in type II at various mints, suggesting possibly that there may have been movement of moneyers between the mints during that issue.²⁰ Robert of London is known for types I, II, and VII and his type I coins are to a large extent, but not entirely, of the last sub-type reading *STIEFNE*. None of Robert's coins were found at Watford. At South Kyme there were 3 out of a total of 40 London coins; Sheldon had none amongst 22 of that mint, whilst Nottingham had no less than 8 out of 10 London coins and of those 8, 5 or perhaps all of them read *STIEFNE*. Linton had 2 coins of Robert, both with no title, as well as others with the same name, of *BMC* type II.

Taking into account all the points made, the conclusions reached as to the dates of deposit of the five hoards examined in detail are as follows:

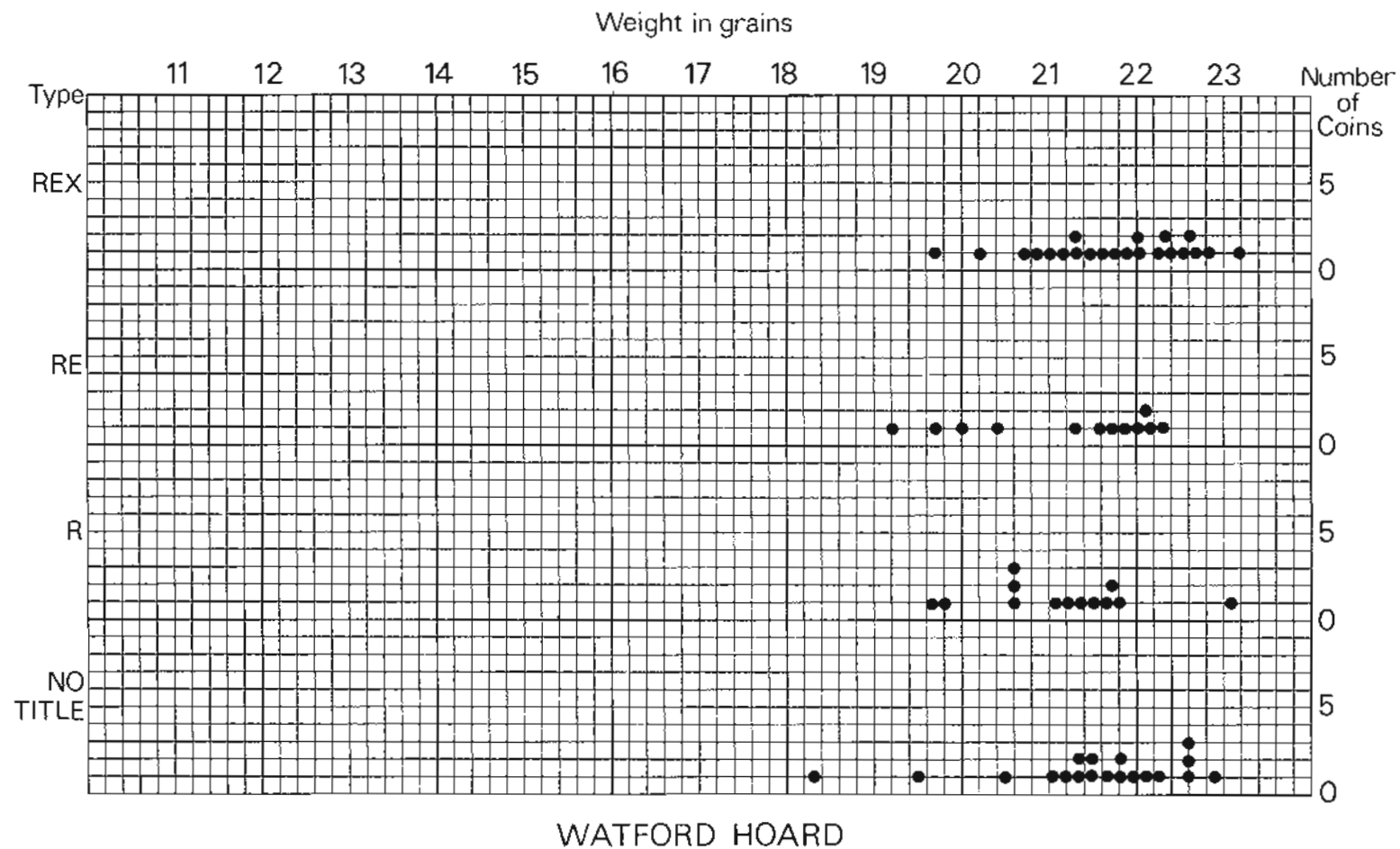
		<i>Types in hoard</i>							
	<i>Henry I or earlier</i>	<i>Stifne Rex</i>	<i>Stiefne Re</i>	<i>Stiefne R</i>	<i>Stiefne</i>	<i>Matilda</i>	<i>Henry of Anjou types P1. P2. FB</i>	<i>Stephen type II or later</i>	
<i>Suggested dates of issue</i>							1 1 1		
—		Dec. 1135 to 1141	1141 to 1145	1145 to 1147	1147 to 1149/50	1142 or poss. 1147	5 5 5 1 1 2	1150 onwards	
<i>Hoard and suggested date of deposit</i>									
Watford (c. 1147)	xxxx	xxx	xx	xx	xx	x	— — — —		
South Kyme (c. 1149)	xx	xxxx	xx	xxxx	xxxx	x	— — — —		
Sheldon (c. 1150)	x	xx	x	xx	xxx	?	— — — —		
Nottingham (c. 1151)	x	x	x	xx	xxx	x	x — — —		
Linton (c. 1152)	x	x	x	x	xx	—	— — — —	xxx	

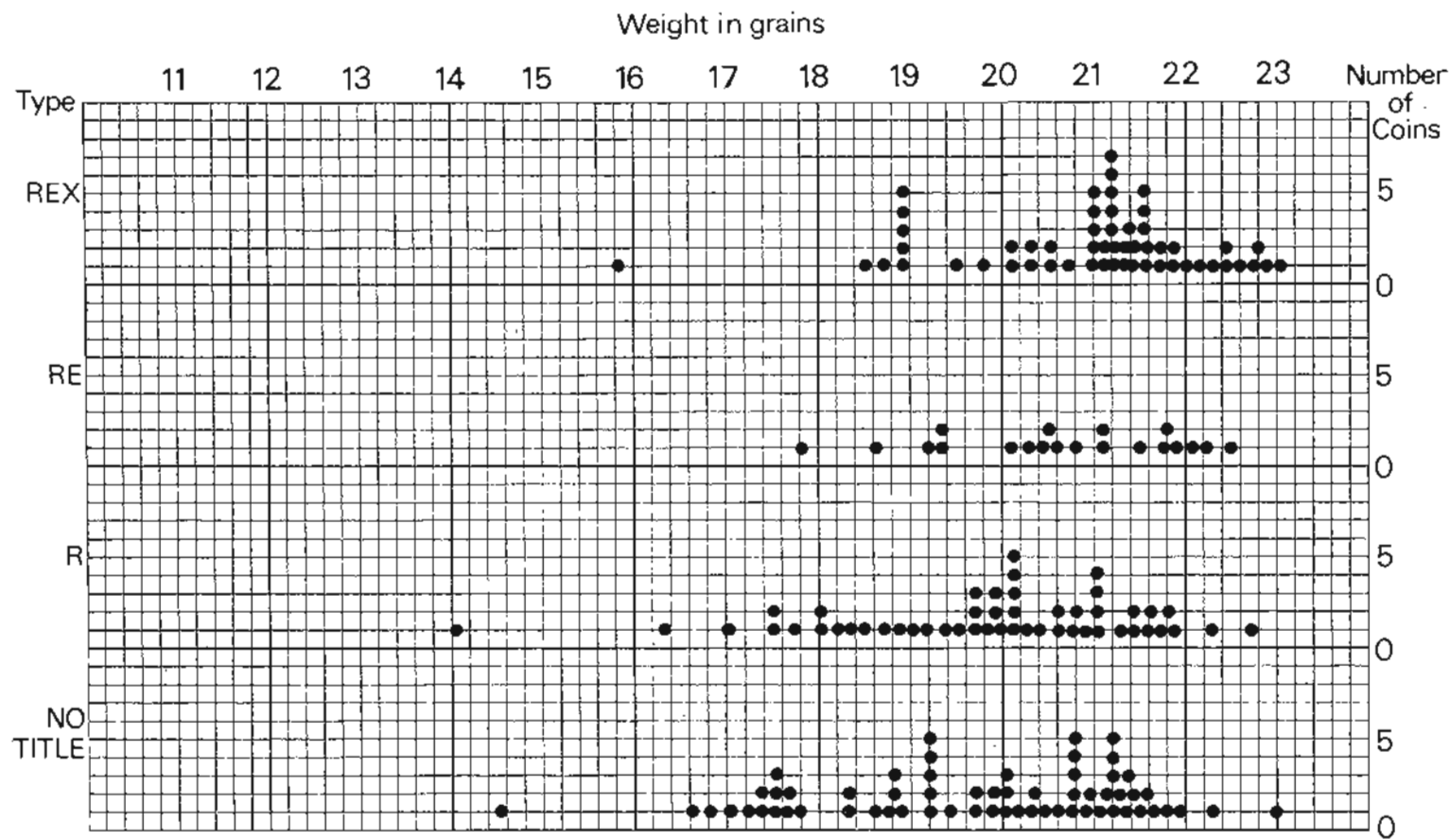
x = under 10 specimens; xx = 10 to 20; xxx = 21 to 50; xxxx = over 50.

It follows that later dates can be suggested for some of the other hoards of the period, in cases where sufficient detail of the contents is known. These include the find at Dartford, which could be tentatively amended to c. 1149 and the find at Winterslow,²¹ which is unlikely to have been concealed before 1152.

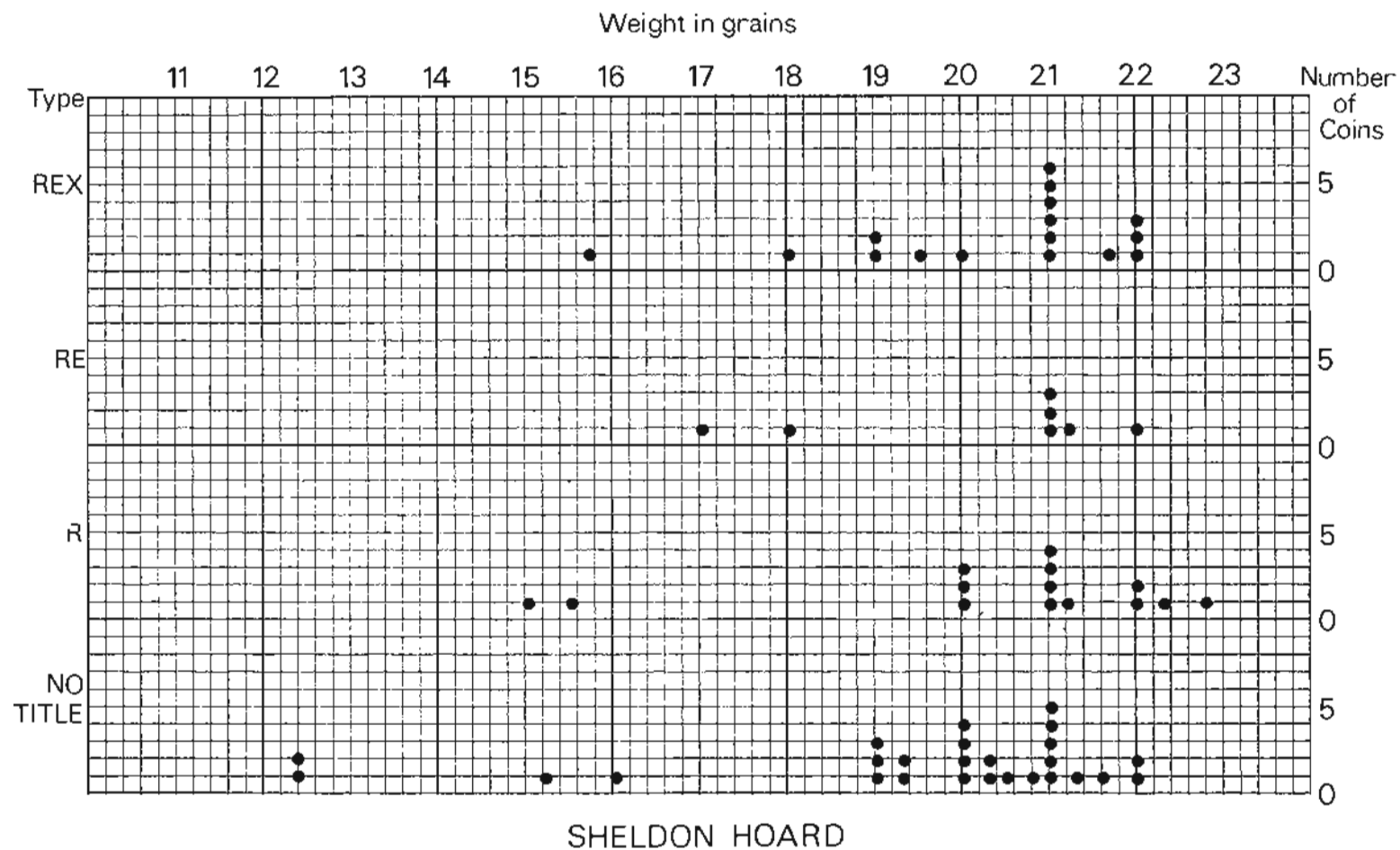
²⁰ Ian Stewart, in *The South Saxons* (1978), p. 126.

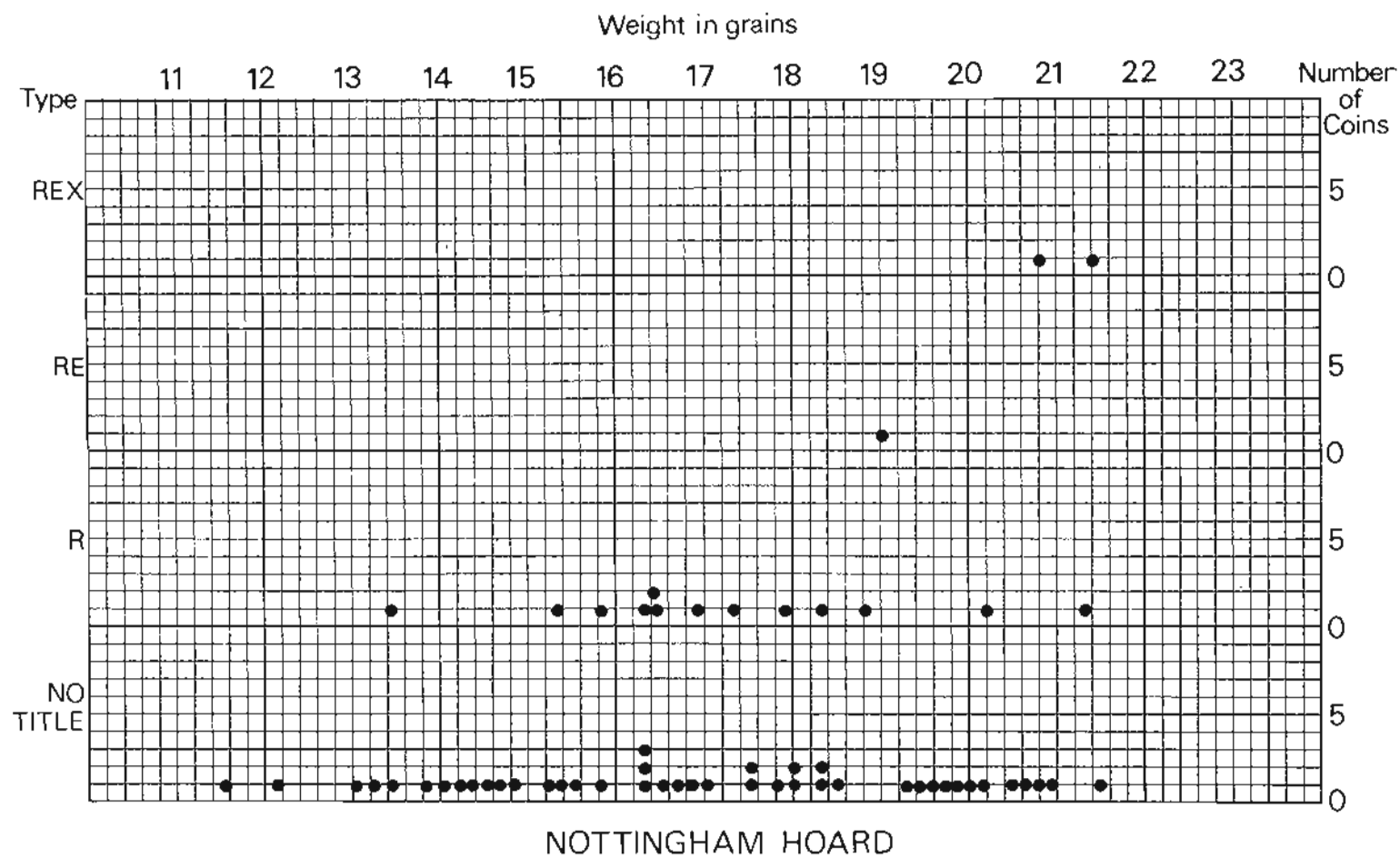
²¹ See note 14.

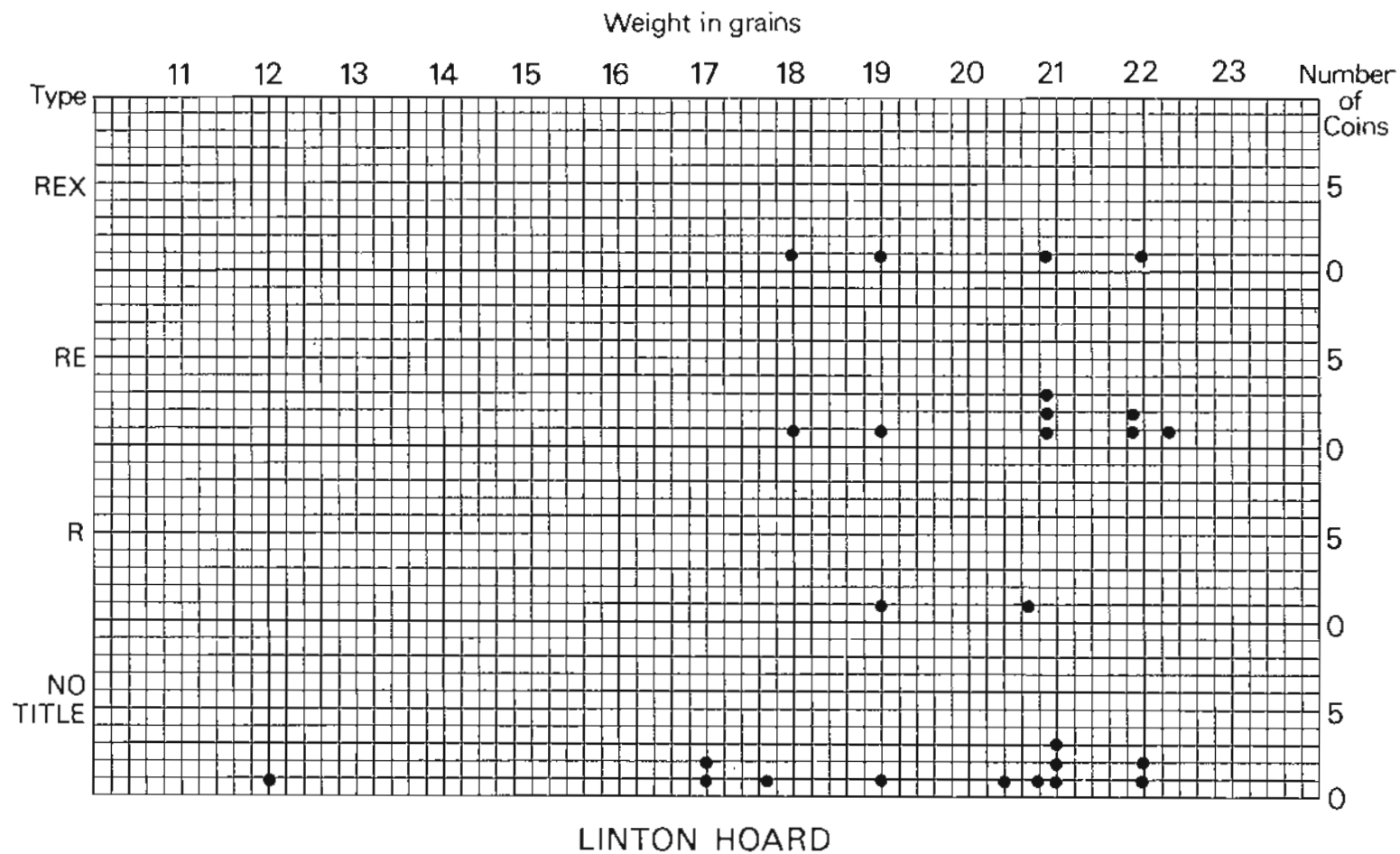




SOUTH KYME HOARD







ELVET MOOR, LUMPHANAN AND DRUMNADROCHIT FINDS OF LATE FOURTEENTH-CENTURY SCOTTISH COINS

JOAN E. L. MURRAY

THE three little-known hoards considered here understandably escaped notice in *Hoard containing early Scottish Groats*, appended to Seaby and Stewart's account of Balleny hoard, 1962, which is the fullest discussion for this period.¹ I have unpublished material on one, the Elvet Moor (Durham) hoard. This did not qualify for inclusion in Dr. Metcalf's list of Scottish coin hoards in *Coinage in Medieval Scotland*, but I was able to provide him with the brief data given there for the other two.²

Elvet Moor, Durham, 30 January 1756

A manuscript account among the family papers of the descendants of John Sharp, archbishop of York, contains a brief listing of the coins found on Elvet Moor, and the Sharp collection almost certainly included a parcel of groats from this hoard. This account is printed below, by permission of the family, from a copy in the possession of Mr. Owen Parsons. I am much indebted to Mr. Parsons for bringing this account to my attention and for enabling me to study the relevant part of the collection, on which he did a great deal of work for the late owner. The manuscript is stated to be in the hand of Thomas Sharp, or possibly of his son Thomas. Thomas Sharp was the younger of the two surviving sons of the archbishop, and his brother predeceased him. He became archdeacon of Northumberland in 1723 and tenth prebendary of Durham in 1730, while in 1755 he was made official to the dean and chapter. In this last capacity he may have been responsible for the disposal of the Elvet Moor coins, and he was probably the best local authority to identify them, because of his father's numismatic studies: certainly the following description shows sufficient scholarship to avoid the common error of attributing coins of Robert II to his more illustrious grandfather, Robert Bruce.

The back of the manuscript reads: Coins dug up in Elvet Moor (How disposed of by the Chapter at Durham). The original spacing has apparently been preserved in the copy of the inside, which reads:

Of David (Bruce)	68	{ whereof 67 stamp ^d at Edinburgh, and one at Aberdeen, a Curiosity.—
Of Robert (Stuart)	88	{ whereof 67 at Edinburgh, and 21 at Perth.
Of Edw ^d 3 ^d of Eng ^d —	1	
In all 157		

[See overleaf for footnotes.]

To the Library	7 the most choice of the whole.
To Mr Dean—	10 picked among the best.
To the Preb ^s 5 each.	60 the fairest that remain, viz.
	2 of David.
	2 of Robert at Edinburgh.
	1 of Robert at Perth.

The Subdean to choose his 5 out of y^e 60.

And rest resident in their Order.

The remainder among the Absent.

Clipt, or otherwise defaced— 80 viz. 39 of David. 38 Robert at Edinburgh.

3 Robert at Perth

—
In all 157

These 80 clipt & most worn will if sold by weight be nearly the value of 2 guineas and $\frac{1}{2}$ given to y^e Serv^t who dug up the Coins.

I am very grateful to Mr. Hugh Pagan for two references to the same hoard, in Sykes's *Local Records*.³ The first⁴ proves to be copied exactly from *The Newcastle Courant* of 28 February, 1756.⁵

1756 (Jan 30)—A pot was found with 142 pieces of Scots silver coin, about three hundred years old, in the ground belonging to George Smith, esq., of Burnhall, in the county of Durham.

The following fuller account, in the second volume,⁶ was presumably contributed by the Revd. James Raine, a well-known antiquary and at that time Chapter Librarian, whom Sykes thanked for 'various valuable paragraphs'.

A labouring man in ditching and scouring a hedge belonging to Mr. George Smith, of Burnhall, found upon Elvet moor, 170 pieces of silver coin included in a pot or small urn, of Edward III of England, and Robert II and David, kings of Scotland. He carried them to a silversmith in Durham, where they were claimed and had by the dean and chapter as treasure trove, found within their manor of Elvet.⁷ Upon a division of this money, the dean had ten pieces allotted to him, and each of the prebendaries five, and

¹ W. A. Seaby and B. H. I. H. Stewart, 'A fourteenth-century hoard of Scottish groats from Balleny townland, Co. Down', *BNJ* xxxiii (1964), 96-106. (SS references are to this hoard Appendix).

² D. M. Metcalf, 'An annotated bibliography of Scottish coin hoards, c. 1100-1600', *Coinage in Medieval Scotland*, British Archaeological Reports xlv (1977), 23-59.

³ John Sykes, *Local Records; or historical register of remarkable events . . . in the counties of Durham and Northumberland*, reprinted and published by T. Fordyce, Newcastle (1866). My page references are to this 1866 edition, but vol. i was originally published in 1824 and a new edition, with vol. ii added, in 1833. Mr. Pagan also provided a reference to Mackenzie and Ross, *View of the County Palatinate of Durham* ii (1834), 326n., which appears to be based on Sykes, but provides the fact that Burnhall is (or was) in Brandon township in Brancepeth parish.

⁴ Sykes, op. cit. i. 213.
⁵ Miss J. W. Thompson, Local History Librarian, Newcastle upon Tyne, kindly checked the *Newcastle Courant* for me. She found no other relevant entries in the *Courant* or the *Newcastle Journal* for that period.

⁶ Sykes, op. cit. ii. 374.

⁷ The dean and chapter may have been mistaken in believing that they had a right to treasure trove, a franchise which is very uncommon. When Elvet Moor was enclosed by Act of Parliament in 1772, they reserved the mineral rights. Mr. George Smith was a nonjuring bishop, with denomination of Durham—another detail which I owe to Mr. Pagan, who suggested that 'the chapter would have taken a certain pleasure in asserting their proprietary rights over a hoard found on Smith's estate'. The nonjurors maintained an episcopal succession from those bishops who were deprived because refusing to take the oath of allegiance to William and Mary in 1689. Originally, at least, they had no doctrinal differences from the established church, and hoped that this would reunite with the nonjuring church. They were not necessarily political Jacobites, but were certainly suspected in 1745, when, on the news of Prince Charles's landing, 'all Papists, reputed Papists, and Nonjurors, were ordered to send to Durham Castle all their horses, mares and geldings exceeding the value of £5 each', and to remain within five miles of their homes—Mackenzie and Ross, op. cit. ii. 352. George Smith (consecrated 1728, died 4 November 1756) was a man of learning and high character, and editor of Bede's works.

others of the pieces were deposited in the library, and such of them whose inscriptions and figures were effaced, were sold. The value of the whole was between four and five pounds. It is very probable that this money had been deposited in this place at or about the time of the battle of Neville's Cross, which was fought not far from it in 1346. The urn and a few of the coins are still preserved in the library.

Unfortunately it is no longer the case that the pot and a few coins are preserved in the library; the Chapter Librarian in 1973, Canon Couratin, had no knowledge of them, nor had his predecessor, whom he kindly asked.⁸ There was presumably also a contemporary manuscript account in the library in 1833, perhaps taking the story a little later than the Sharp one, after some strays had brought the number of hoard coins up to 170, instead of 157.

It is reasonable to assume that Thomas Sharp would have listed Robert III coins separately from Robert II, if both types were present; and also that he would have distinguished different denominations. A calculation of the average weight of the hoard coins from the estimates of its value shows that at least the majority of the coins were groats, as might have been expected.⁹ A date towards the end of Robert III's reign, or even the beginning of the next (in 1390), is indicated by the Robert coins outnumbering David ones. The same is true of Neville's Cross hoard, and that indicated by beach finds at South Shields.¹⁰ These three hoards perhaps form a sufficiently tight group, geographically and by deposit date, to justify considering whether there might have been a common cause for their loss, and there were certainly Scottish incursions in the appropriate period—whereas the battle of Neville's Cross was far too early.

A fourteen-year truce between England and Scotland was nominally in force until February 1384, but after Edward III's death the Scots defaulted on the instalments of David's ransom (after the payment at midsummer 1377), and in 1378 the nobles resumed raids across the border. Of these raids, that in 1388 was unusual in penetrating to Durham itself. The main Scottish invasion was on the west, but a force about 2300 strong went by byroads until 'they entered the rich country of Durham, and instantly began their war, by burning towns and slaying the inhabitants'.¹¹ Durham and Newcastle were, of course, adequately defended against a light raiding force, but there were skirmishes at the gates of both. When the Scots moved back home, Percy pursued them with superior forces, without waiting for the bishop of Durham and his men, so these escaped the bloody encounter at Otterburn, where the attack on the Scottish camp was beaten off with heavy English losses: this may be thought to weaken the case for associating these three hoards from County Durham with the 1388 incursion.

It will be apparent that I do not think it likely that this pot hoard represents the

⁸ Letter dated 11 October 1973.

⁹ The following calculations use the rather arbitrary figure of 48s. for 'nearly the value of 2½ guineas' for 80 coins, which is slightly above the top end of the range in the other estimate (perhaps not independent) of £4 to £5 for 170 coins. At this date, sterling silver was coined at 5s. 2d. per Troy ounce, so the average weight works out at 55.8 gr. If they were all groats, this would certainly be low, but it is not impossibly low as referring to the most clipped and worn half of the hoard. The five light-coinage groats among those listed below as probably

from Elvet Moor average more than 2 gr. below the standard of 61.4 gr. On the same basis, the value per piece, by weight, would be 7.2d.

¹⁰ SS xiii and xviii: *NC*^s xi (1931), 201–28; *BNJ* xxx. 100 and 116–17.

¹¹ J. Froissart, *Chronicles*, tr. T. Johnes (1805–6), ix. 246. 'Near to Brancepeth'—the parish in which Burnhall is situated—precedes the quoted passage, but apparently referring to where the Scots crossed the Tyne, whereas Brancepeth is south-west of Durham.

cash of a traveller from Scotland, although not casting any doubt on that as an explanation for some of the smaller finds of Scottish coins beyond the borders of that country. The composition of Elvet Moor hoard is certainly exceptional for England, although Scottish coins were at this time allowed currency in England, and Neville's Cross hoard may be representative of the circulating medium in the area: in this, although English coins predominated, they were mainly pennies, whereas the Scottish were groats and half-groats and gave nearly half the value, even reckoned at their English currency value of threepence (from 1373 to 1390). This valuation of the somewhat lighter Scottish coins would provide a reason for the owner to separate off the Scottish portion of his spare cash, if only for convenience in reckoning. The Gisors hoard is a clear case of segregation of foreign coin, but these were in a leather bag or purse within the one bronze container.¹² Another aspect of the English valuation for these Scottish coins is that anyone in a position to smuggle them across the border could expect a better return for them in Scotland, where they would be taken at par with the rather heavier English coins. (The single English coin in the 157 listed, if not included in the pot in error, might have been too light to pass in England.) The proscription of Scottish pennies and halfpennies, from Michaelmas 1387, may have led English holders of the higher denominations, too, to fear stronger measures against their use.

The Sharp coins

Although Archbishop Sharp left his coin collection to his friend and fellow collector, Ralph Thoresby of Leeds, it remained in the family (or was returned). There were certainly some additions after his death in 1713, and these probably included seven groats from Elvet Moor hoard. The collection contained four groats of David II and four of Robert II. Of these, seven were alike enough in patination to have the same provenance, although this patination is not distinctive enough to be conclusive.¹³ The remaining one is thoroughly blackened with silver chloride and badly scratched, doubtless in an attempt to remove this: its weight, 62.8 grains, agrees with the single piece of either reign which was in the collection in 1699, described as 'a groat of David Bruce . . . The weight of this piece is 3 penny weight wanting 9 granes', i.e. 63 grains.¹⁴ Archdeacon Thomas Sharp could easily have acquired two more pieces than his allocation of five as prebendary, either from another member of the chapter or from those remaining, to be sold.

The following notes on the coins include some comments from Mr. Ian Stewart on the David pieces. I am also much indebted to him for material for a die-study of Robert II coins, which I hope to publish separately, from which certain changes in the lettering can be recognized as indicating the sequence within the large number of ordinary groats, i.e. those before the use of a B behind the king's head, which can be dated about 1385. (There were other and later changes, of course.) In particular,

¹² F. Dumas and J. D. Brand, 'The British coins in the Gisors (1970) hoard', *BNJ* xl (1971), 22.

¹³ No. 1 is blackish in most of the outer ring of lettering, then brown to yellow towards the centre. Most of the others are less strongly coloured, although I noted them as similar, and one has some pitting.

¹⁴ Quoted from a manuscript copy of Abp. Sharp's *Observations on the coinage of England, Scotland and Ireland*. The printed version is in *Bibliotheca Topographica Britannica* xxxv (1785): his letter to Thoresby dates the work as about January 1699.

a new punch for the large A of VILLA was introduced about a third of the way through these ordinary Robert II groats: a sample¹⁵ gives the following distribution:

Edinburgh	A 1—34	A 2—56
Perth	A 1—11	A 2—47
Totals	A 1—45	A 2—103 in 148

1. David II, Edinburgh groat; heavy coinage, third head (Stewart C), plain A (early in C); obv. die reads *Scotorvm*+ (but end not legible on this coin); small D under v of *Villa*. Dupl. of RCL plate VII²³ (British Museum photographs of R. C. Lockett's Scottish coins). Wt. 63.3 gr.

2. As 1, but *Seotorvm*, ornamental A, trefoils in spandrels, Robert II head (Stewart D); no small D on rev. Dupl. of RCL VII⁴⁴, now in Mr. Stewart's coll. Wt. 64.6 gr.

3. Light coinage; as 2, but reads *Scotorv*; head set right back on tressure, and rev. has two stars after *Dns*—both late features. Obv. die same as Balleny 16. Wt. 59.1 gr.

4. Robert II, Edinburgh groat, as standard (reading *Scottorvm* in this reign); A1 in *Villa*. Obv. die known, in Mr. Stewart's coll. Wt. 60.3 gr.

5. As 4, but A2. Obv. die not matched. Wt. 56.7 gr.

6. Robert II, Perth groat; standard, except reading *Villa ed Perth*; A1 in *Villa*, as on other dies with this reading. Dies not matched. Wt. 60.8 gr.

7. As 6, but *de* and A2. Dupl. of RCL VIII⁴⁰, now in Mr. Stewart's coll. Wt. 58.7 gr.

The evidence of this small sample is almost valueless for dating the hoard. The two latest coins, 5 and 7, show more wear than some of the earlier ones.

Lumphanan, Aberdeenshire, before May, 1750

An account of Lumphanan hoard was published in *Coins and Medals* for November 1966, under the title 'Where the Rainbow Ends', but the primary reference on which that must have been based is *The Scots Magazine* for May 1750, p. 253.

Letters from Aberdeen bear, that some time ago, as some workmen were digging for a new entry to the church-yard of Lumphanan, they found an earthen pot full of old pieces of silver coin; that many of them were so consumed with rust that they easily mouldered away; that those on which any of the characters are legible, are coins of the Kings Robert and David of Scotland, whose heads they bear, and appear to have been struck at Edinburgh, Perth, and Aberdeen; and that Mr. Downie,¹⁶ Minister of the parish, sells those struck at Edinburgh and Perth, at 5s. and those struck at Aberdeen at 10s. for the benefit of the poor, whatever is found within the church-yard being their property.

The Statistical Account of Scotland, for Lumphanan parish, written in 1793, doubtless refers to the same hoard: 'A few old coins were found some years ago, when repairing the church-yard dykes, and a mortcloth bought with them.'¹⁷ The purchase of a parish mortcloth was a legitimate charge on the poor-box, indeed a prudent investment, as the compulsory fee for its use at funerals, to cover the coffin, was one of the normal supplements to the church collections, for maintenance of the poor.¹⁸

¹⁵ This sample excludes Balleny hoard coins, since that deposit date was early in Robert II's reign. For Balleny, the split is A1-7, A2-3, with one illegible.

¹⁶ *Fasti Ecclesiae Scotticanae* gives his name as Francis Daune.

¹⁷ (Old) *Statistical Account of Scotland*, vi. 388 n. I owe this reference to I. D. Brown and M. Dolley, *Coin*

hoards of Great Britain and Ireland, 1500-1967. With no other information available, Lumphanan had to be listed as of uncertain date, SZ22.

¹⁸ H. G. Graham, *The social life of Scotland in the eighteenth century* (1950), 245. The main means of supporting the poor was by licensing them to beg within their parish.

In 1793, when there were six on the poor-roll, the weekly collections were only about 10*d.*, and it is unlikely that the situation was any easier in 1750.

Register House in Edinburgh holds an official copy of the record of payments of mortcloth dues, 'extracted from the Sessional Register of Lumphanan . . . in terms of the Acts . . . and 23° & 24° Vict. cap. 85', containing forty-three entries for 1755 to 1781. One entry occasionally covered more than one death, but the number of deaths recorded in this list is still low in relation to the population (682 in 1755) and to the baptisms, of which there were twelve and fourteen in 1755 and 1756. While the population of the parish was probably growing, and migration to towns would help to account for these figures, I suspect that there were additional deaths: there would naturally be no entry of this type for paupers, where the burial was a charge on the parish instead of contributing to the poor-box, and for others who were not actually on the poor-roll the family might have been excused this payment on the grounds of poverty. In this record, the switch from reckoning in Scots money to sterling occurred in 1777, the normal payment being 12*s.* or 18*s.* up to then and 1*s.* afterwards.

The Kirk Session records for the period covering the find are no longer held by Lumphanan parish,¹⁹ nor are they among those in the Scottish Record Office on loan from the Church of Scotland. (The cost of a mortcloth at that period might be obtainable from other sources, as some guide to the size of this hoard, but I have not pursued this idea.) In view of the continued reckoning in Scots money in the Lumphanan records, the price put on the Edinburgh and Perth coins was presumably only 5*d.* sterling, and this would be below the value per piece of the Elvet Moor coins, if sold by weight;²⁰ but even if the minister was not able to get a better price from antiquaries than from a silversmith, numismatists must consider that it was a better way of disposing of them.

There can be no certainty about the denominations²¹ of the Lumphanan coins, but the deposit date cannot have been earlier than Robert II's reign, since Robert Bruce's coins do not bear a mint name, and David's were not struck at Perth. The relative prices suggest that Perth coins may have been present in about the same numbers as Edinburgh ones (or ones of the same reign), but it might simply reflect their proportions in collections, and is thus of little value as an indication of date or of a regional distribution. Aberdeen coins were clearly more plentiful in this hoard than the single one of Elvet Moor hoard, while there were none in the better-recorded Craigie hoard,²² with seventy-eight pieces of the David II and Robert II groat coinage. The lack of mention of any English coins in Lumphanan hoard fits in with other hoard evidence from Scotland, at least for the end of Robert II's reign and the

¹⁹ Mr. R. H. Duguid, as church treasurer, answered my enquiry, in October 1974. He also informed me that the Kirk Session no longer has any of the hoard coins, and he was unaware of the find.

²⁰ Calculated on p. 75 n. 9, as 7·2*d.*

²¹ Or even the types, as there might have been some Robert III pieces included, with front face, and pellets instead of mullets in the angles of the rev. cross. Although I know of no hoard which definitely contained David II coins together with Robert III ones, and the older coins were certainly used as bullion for the front-

face coinages of Robert III, a mixture could be expected in hoards soon after the recoinage began. Fortrose (1880) hoard was deposited not long before the standard weight was reduced again; there is a Robert II groat with this provenance in NMAS, although E. Burns mentioned only Robert III groats in 'Descriptive notice of the coins in the Fortrose hoard . . .', *Proceedings of the Society of Antiquaries of Scotland* (1879-80), pp. 186 ff.

²² SS xxii, A. B. Richardson in *Proc. Soc. Antig. Scotland* (1893-4), pp. 277-8.

following reign, and this type of cumulative evidence is perhaps the most valuable contribution of such inadequate hoard records.

Disorder was rife under the weak rule of the first two Stewart kings, and the north-east of Scotland suffered particularly. Alexander Stewart, earl of Buchan, one of Robert II's sons, misused his office as justiciar of the north until he was deprived in 1388. Known as the 'Wolf of Badenoch', he exacted what amounted to blackmail or protection money. When the bishop of Moray turned elsewhere for help, in 1390 Highlanders led by the Wolf burnt Forres and Elgin with its cathedral: 'This beand done, as my author did mene, That samin tyme passit till Abirdene.'²³ Dipple hoard, for which Mr. Stewart put the deposit date as 1385-90,²⁴ might possibly be related to these events of 1390; but they are only the highlights of many years of lawlessness and it would be very rash to attempt to assign a date to an ill-recorded hoard like the Lumphanan one by relating it to any particular historical event.

Drumnadrochit, Inverness-shire, December 1931

The acquisition by the National Museum of Antiquities of Scotland of one David II and two Robert II groats from this hoard is recorded in the *Proceedings of the Society of Antiquaries of Scotland* lxvi (1931-2), 138. In the Society's library copy, Mr. R. B. K. Stevenson has copied out Sir George Macdonald's summary listing of the thirty-four coins of this hoard, and he provided me with the December 1931 date. A Perth groat from the same find, reading *Villa ed*, is in the Elgin Museum, the find spot being recorded as being on the supposed site of St. Ninian's Chapel, near Temple Pier, and the date as January 1932.²⁵

The summary list is:

David II	Edinburgh	11 groats, 1 half-groat
Robert II	Edinburgh	12 groats
	Perth	9 groats
		1 half-groat

The two Robert II coins in NMAS are of Edinburgh mint:

1. Single + stops on obv., except the normal double ones after *Rex*. Double star stops after *Dns*—a rare early variety, for which cf. Balleny 20 (different dies).
2. Standard, double stops. As in *Villa*.

Once again, the ratio of Robert II coins to David II's argues for a late deposit date for this hoard, i.e. towards the end of Robert II's reign (1390), or indeed early in the next reign, since I am not entirely convinced by the arguments in favour of an earlier date than 1393 for the introduction of the light front-face groats, of which the great majority were certainly struck under Robert III.

²³ H. Boethius (Boece), *The buik of the croniclis of Scotland; or a metrical version of the history of Hector Boece*, by W. Stewart (ed. W. B. Turnbull), Rolls ser. 6, 1858, vol. iii, p. 442.

²⁴ 'The Dipple and Balgony finds of fourteenth-century Scottish coins', *BNJ* xl (1971), 57-61.

²⁵ *Ibid.*, p. 58.

THE REIGATE HOARD

MARION M. ARCHIBALD

THE Reigate hoard was found on 31 October 1972 by Mr. C. M. Gibbs at Nut Wood, Gatten Park, Wray Lane, Reigate, Surrey (TQ26635186). The find-spot was just over the brow of an escarpment on the north-east side of Wray Lane where a footpath runs along the top and it seems probable that the hoard was hidden at the edge of a medieval track following the same route.¹ The hoard was declared treasure trove at Reigate on 2 February 1973.

The hoard was contained in a pot² and this partly accounted for the remarkably fine condition of the coins. Eighteen required minimal chemical cleaning to remove surface incrustations but the rest only needed washing to restore them to the state in which they had been deposited. The earliest coins were groats and half-groats of Edward III's Pre-Treaty Coinage, series C, struck from 1351 and the hoard closed with a group of Leaf-Pellet groats of Henry VI which included all the major sub-types except for the last, rare, unmarked issue. Since the following type, the Cross-Pellet issue, is not uncommon its absence from the hoard may be taken as significant and the deposition dated to c. 1454-5.

There were three gold coins, two Annulet nobles of Henry VI, including one of the rare early variety with lion—lis—lis—lion—lis on the ship's side, and one quarter-noble of the same type. All were struck at London, underlining the pre-eminence of that mint in the gold in contrast to the dominance of Calais in the silver issues of the same period. It is not surprising that the gold coins present should have been of the Annulet issue although they had been struck some thirty years before the deposition of the hoard since such vast quantities of them were struck. The Fishpool hoard³ showed that almost half the English gold coins in circulation a decade later on the eve of the currency reform of 1465 were still survivors of the Annulet issue. In contrast to the Annulet silver coins in the hoard, the three gold coins were not clipped and were virtually unworn, demonstrating the less active circulation of the higher denominations. Their weights were similar to those of many newly struck coins, just under the standard issue weights of 108 gr. and 27 gr. at 6.98 g. (107.7 gr.), 6.96 g. (107.4 gr.), and 1.73 g. (26.7 gr.) respectively.

The remainder of the hoard consisted of silver coins: 880 groats, 101 half-groats, and 3 pennies. The groats and to an even greater extent the half-groats of Edward III were very worn and clipped. They sometimes lacked almost the entire outer legend although more commonly the clipping took the form of an arc extending around three-quarters of the circumference leaving one cross-end intact. One of the 3 pennies

¹ The find-spot is described by D. G. Bird and D. J. Turner in their discussion of the container in *Surrey Archaeological Collections*, vol. 70 (1974). The preliminary listing which appeared in *Coin Hoards*, i (1975), 376 requires slight modification in the light of this paper.

² The pot is discussed by John Cherry of the Department of Medieval and Later Antiquities in the British Museum in the Appendix.

³ M. M. Archibald, 'Fishpool, Blidworth (Notts.), 1966 hoard', *NC* 1967, pp. 133-46.

in the hoard was a very worn penny of Edward III of the York mint. There was just one groat of Richard II and no coins of Henry IV. The 58 groats of Henry V were of the common type C except for two coins of type A, one of which was muled with an obverse of Henry IV. No half-groats of this reign were present but a battered penny of York was included.

Coins of Henry VI accounted for 83 per cent of the silver coins in the hoard and totalled 817 pieces: 748 groats, 69 half-groats, and no pennies. The majority were from the first Annulet issue, most of them struck at Calais. Totals for each type, denomination and mint are given in the following table and full details in the List of Coins.

English Silver Coins in the Reigate Hoard

	Groats			Half-groats			Pence	Total
	London	Calais	York	London	Calais	York	York	
Edward III								
Pre-treaty C	24			16				40
D	8		1	5				14
E	17		4	2		2		25
F	6							6
G	11			3			1	15
Treaty	1			3				4
Post-treaty	1							1
	68		5	29		2	1	105
Richard II	1							1
	1							1
Henry V								
Class A	2							2
C	56						1	57
	58						1	59
Henry VI								
Annulet	38	383		5	50			476
Rosette-Mascle	2	136			9			147
Pinecone-Mascle	16	100		1	1			118
Leaf-Mascle		2						2
Leaf-Trefoil	13							13
Trefoil	2							2
Leaf-Pellet	56			3				59
	127	621		9	60			817
Total	244	621	5	38	60	2	2	982

The absence of Henry VI groats and half-groats of the York mint in a hoard containing so many coins of the reign is an index of the rarity of these two denominations at York which concentrated on the production of pence. The groats of Henry VI provided the usual quota of mules: Annulet/Rosette-Mascle (Pl. II, 207), Rosette-Mascle/Pinecone-Mascle (Pl. II, 210), and Leaf-Trefoil/Leaf-Mascle (Pl. II, 225) at London and Annulet/Rosette-Mascle (679-86), Rosette-Mascle/Pinecone-Mascle (815-18), Pinecone-Mascle/Rosette-Mascle (819-20), and Pinecone-Mascle/Trefoil, or possibly Leaf-Trefoil (Pl. II, 916) at Calais. One Leaf-Pellet

groat at London (Pl. II, 245) had been struck with a reverse die which, unusually, had an initial cross. This die was the same used for Whitton 65a⁴ which had an Unmarked Issue obverse. The Reigate coin, however, had an obverse die of the Leaf-Pellet type B issue which was also used for another coin in the hoard with a normal Leaf-Pellet reverse (Pl. II, 246).

The groats of Henry VI included a large number of coins with spelling errors in the legends, some of which had been rectified by the punching in of the correct letters over the wrong ones (*e.g.* 806-14, Pl. II, 811). The Leaf-Pellet coins in the hoard were all in mint condition but they had been carelessly produced; the flans were somewhat irregularly shaped and areas of the legends had not been properly struck-up. Care was evidently being taken, however, to eliminate the spelling errors of earlier issues and the Leaf-Pellet coins in the hoard did not exhibit a single one. It was also clearly considered important that the full reading *FRANC* should be included at the end of the obverse legend on the groats so that when the die-maker found himself running out of space he used the *c* punch of the penny or even the half-penny fount (Pl. II, 291) in order to squeeze in the final letter before the initial cross. Sometimes the final *c* and any stop following it were punched on to the die over the top of the initial cross (Pl. II, 243). On these coins there is a normal amount of space left between the initial cross and the first letter of the king's name which suggests that, here at least, the initial cross was punched on to the die before the rest of the legend. It also means that the punches for making all denominations of the coinage were to hand in the same workshop, suggesting that the dies were produced by a comparatively small number of people.

Unlike other fifteenth-century hoards which regularly included a sprinkling of forgeries, Reigate was entirely free from them. It was by any reckoning a parcel of 'good money' but the hoarder, or someone who had handled the coins very shortly before he acquired them, had taken special care to test a selection by snicking the edges to make sure that none were plated. The perfectly innocent groat of Henry V illustrated on Fig. 1 had recently been cut with a knife about fifty times around the edge. Other coins in the hoard exhibited a slightly dished appearance—a phenomenon also noted in some coins in the British Museum from the Stamford find—and this may possibly be explained as the result of another method of testing the coins since, if plated forgeries were bent, the thin skin of fine metal would have been likely to crack revealing the base-metal core. The hoard similarly excluded any examples of forgeries struck with false dies on light-weight or base-metal blanks such as had been found in the Wyre Piddle hoard.⁵

There were just two foreign coins in the hoard, a worn half-groat of Robert II of Scots and an almost illegible sterling of John the Blind of Luxembourg.

Hoards buried in the middle of the fifteenth century are very rare. Students of the period have noted a complete absence of hoards from England and Wales in the period between *c.* 1435-40 and 1460.⁶ In fact the situation is not quite as bad as this

⁴ C. A. Whitton, 'The Heavy Coinage of Henry VI', *BNJ* xxiii (1938-41), 59-90, 205-67, and 399-437.

⁵ M. M. Archibald, 'The Wyre Piddle (Wores.) 1967 hoard', *NC* 1970, pp. 133-62.

⁶ A list of hoards deposited in England and Wales between *c.* 1425 and *c.* 1513 is given in N. J. Mayhew,

'The monetary background to the Yorkist recoinage of 1464-71', *BNJ* xlv (1974), 62-73 on pp. 65-6. The lack of fifteenth-century hoards is also discussed by P. Spufford in *Monetary problems and policies in the Burgundian Netherlands 1433-96*, Leiden, 1970.

for the Holwell hoard 1864 (*Inventory* 192) which they have followed Thompson⁷ in dating to the 1420s or c. 1430 was in fact buried around the same time as Reigate, c. 1455. The British Museum acquired twenty-seven coins from the find and they include several coins of the Leaf-Pellet issue.⁸ The original publication, while remarkable for its time, does not list the coins clearly enough to allow the numbers of the different issues present to be determined. Similarly, few of the hoards from the periods immediately before and after are of statistically viable size or have been published in the detail required for modern currency studies. The great Stamford hoard 1866 (*Inventory* 340) buried c. 1465 for example which had originally contained over 3000 coins could have provided so much information about the issues of Henry VI but only an obviously biased sample of 251 English coins were available for listing in the publication. Reigate, an intact hoard of nearly 1000 coins buried c. 1455, therefore provides evidence of a particularly important character. The information which it provides about the composition of the currency as far as the groats are concerned is compared in the following table with that from four smaller hoards⁹ buried some years before and after.

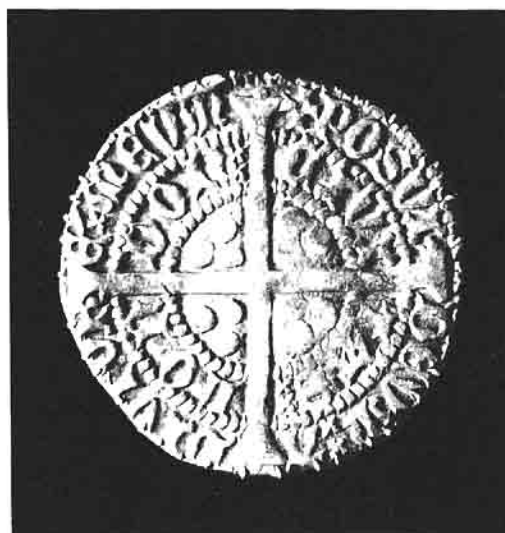


FIG. 1

	<i>Hampshire</i> c. 1435	<i>Reigate</i> c. 1455	<i>Reculver</i> c. 1460	<i>Diss</i> c. 1465	<i>Aberdeen</i> c. 1466
Number of groats	106	880	52	159	179
Edward III	18.9%	8.3%	15.4%	0.6%	22.3%
Richard II	0.9%	0.1%	—	—	—
Henry IV	1.9%	—	1.9%	—	—
Henry V	7.6%	6.6%	3.8%	7.5%	11.2%
Henry VI Annulet	57.5%	47.8%	30.8%	50.3%	44.1%
Later	13.2%	37.2%	48.1%	39.0%	19.0%
Edward IV	—	—	—	2.6%	3.4%

The erratic proportions of coins of Edward III present, which naturally affect the scale of the later figures, probably reflect the extent to which the particular hoards were composed of 'good money'. Clearly a lot of badly worn and clipped groats of Edward III were still around in currency and whether or not they were hoarded

⁷ J. A. D. Thompson, *Inventory of British coin hoards A.D. 600-1500*, Royal Numismatic Society, London, 1956. Hoards mentioned in this essay which are listed by Thompson are referred to as *Inventory* followed by the number under which they are listed with full bibliography by Thompson.

⁸ A note on the Holwell hoard by the author will appear in *Coin Hoards*, v. 1979 (forthcoming).

⁹ Hampshire 1905 (*Inventory* 183), Reculver 1926 (*Inventory* 316), Diss 1871 (*Inventory* 120) and Aberdeen 1937 (*Inventory* 5).

depended upon individual circumstances. The larger proportions of older coins in the Aberdeen (and other later Scottish hoards) indicate that the old English 'white money' which had already crossed the border continued to circulate long after the English reform of the coinage in 1465 had caused it to disappear from currency in the south. The Annulet issue is predictably better represented in the Hampshire hoard which was deposited before the later issues of Henry VI had made their presence felt in the currency. The Reculver hoard included an abnormally low number of Annulet coins compared to later issues. Thompson (*Inventory* 316) implied that the hoard was nearly complete and if this were so then the anomalies in representation must have been the result of the individual circumstances of the hoarder or his source rather than the surviving coins being merely a biased sample from a larger hoard.

The average weights of the different major groups of coins in the hoard obtained from bulk weighings at an early stage in the sort were as follows:

	<i>Average Weights</i>			
	<i>Groats</i>		<i>Half-groats</i>	
	<i>No. of coins</i>	<i>weight</i>	<i>No. of coins</i>	<i>weight</i>
Edward III	73	54.0 gr.	31	25.0 gr.
Richard II	1	56.3 gr.		
Henry V	58	56.9 gr.		
Henry VI Annulet London	38	56.6 gr.	5	27.3 gr.
Annulet Calais	383	56.9 gr.	50	28.1 gr.
Rosette-Mascle	138	57.7 gr.	9	27.8 gr.
Pinecone-Mascle	116	58.5 gr.	2	29.2 gr.
Leaf-Mascle	2	58.6 gr.		
Leaf-Trefoil	13	59.2 gr.		
Trefoil	2	59.9 gr.		
Leaf-Pellet	56	59.2 gr.	3	29.8 gr.

The average weights show a fairly steady increase from the oldest to the most recent issues with the few anomalies explicable by the small numbers of those particular coins present. The half-groats exhibit the greater loss of weight typical of the lower denominations which were subjected to more active circulation. The majority of coins in each issue, however, individually weighed considerably more than these averages which had been pulled down by a large 'tail' of clipped coins. The Annulet groats for example peak on 58.7 gr. in the histogram of weights, Fig. 2, while their average weight is just 56.6 gr. or 56.9 gr. at London and Calais respectively.

The individual weights of the groats of Edward III and those of the Annulet issue (both mints combined) and the Leaf-Pellet issue of Henry VI in the hoard are expressed as histograms in Fig. 2. The intervals are 0.02 g. The Leaf-Pellet coins which were in absolutely mint condition peak just under the standard weight of sixty grains, and although there are too few coins to show the pattern very clearly, the distribution is the same lop-sided one previously noted with other groups of recently struck coin where the profitably heavy coins had, for the most part, been rapidly culled for reminting or recycling as bullion elsewhere.¹⁰ Although some of the

¹⁰ M. M. Archibald, 'The Mayfield (Sussex) hoard of Albert Baldwin, ed. R. A. G. Carson, London, 1971, c. 1307' in *Mints, dies and currency. Essays in memory* pp. 151-9.

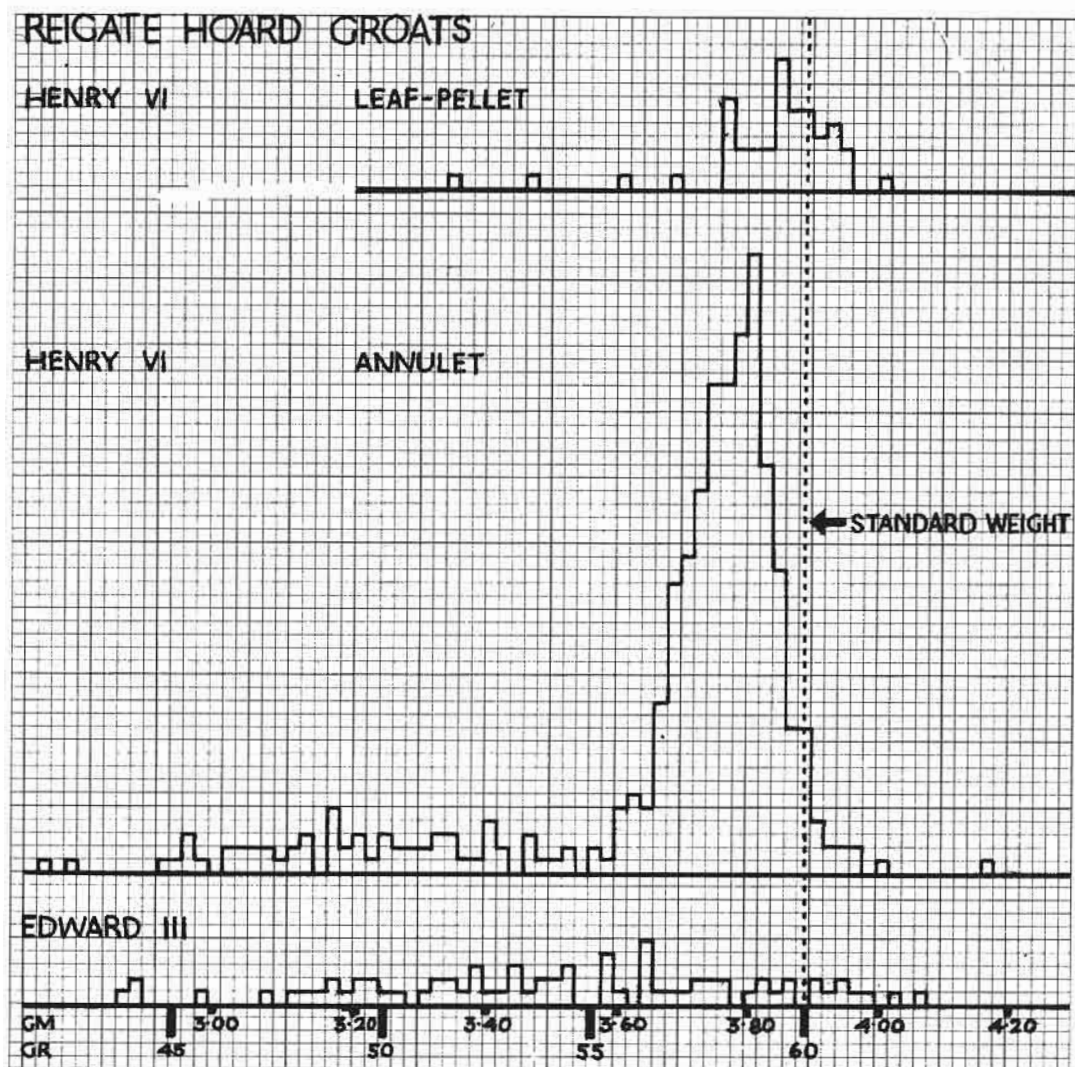


FIG. 2

Annulet groats were still in almost mint condition, most of them displayed a fair amount of wear and a considerable number had been badly clipped. The contrast in the individual condition among coins struck at the same time from the same hoard is at first sight quite startling and illustrates the difficulty in estimating the duration of currency for isolated site-finds. The histogram reveals, however, that while there was an appreciable 'tail' of low-weight, clipped coins, the bulk of the group conformed to the normal pattern. Although 17.4 per cent were four grains or more below the standard issue-weight of 60 grains, 79.7 per cent weighed between 56 and 60 grains and 2.9 per cent still exceeded the standard even after some thirty years of theoretical

circulation. The histogram of the weights of these Annulet groats also reproduces the familiar lop-sided distribution: the outline has become more spread in the three decades or so since the coins were first put into circulation and there is now the predictable 'tail' of clipped coins, but the basic shape is unmistakable. Wear on the individual coins has merely caused it to move about 0.06 g. or 0.09 gr. lower down the weight-scale from the position just under the standard weight which, on analogy with other coinages, it may be postulated to have occupied shortly after the coins were issued. This shows that the loss of weight accounted for by wear alone was small, an average of c. 0.03 gr. per annum for this particular group of coins. The decline in weight from the official standard indicated by the average weight of the group as a whole was therefore due more to the nefarious practices of culling and clipping than to the effects of circulation. The 'velocity of circulation' of these groats was thus less than might have been imagined from the evidence of the average weight alone. In the absence of other large, intact hoards of the period it is impossible to say how general this pattern was. In coinages which remained in circulation for long periods or which enjoyed more active currency, the tendency for the lop-sided distribution to spread would increase as time passed and the weight-pattern would gradually revert towards the standard, equal-sided distribution at which the coins had originally been struck, although now on a much broader base. The weights of the Edward III groats in the present hoard form just such a pattern.

Forty-three coins were acquired by the British Museum and five coins by the Guildford Museum. The finder was rewarded with the market value of these coins and the remainder were returned to him in lieu of further reward. Before the hoard was dispersed, a complete photographic record was made of the hoard and may be consulted in the British Museum.

LIST OF COINS

* Denotes coins in the British Museum

† Denotes coins illustrated on Pl. II

GROATS

LONDON

Pre-Treaty Period

EDWARD III

	B/C	All cusps fleured, annulet stops:		
1		hYB' DEV MEV	3.94	1
2		details illegible	3.44	1
	C	All cusps fleured, annulet stops:		
3		DEI G hYB POSVI. DEV MEV.	3.16	1
4		DI. G. hYB POSVI. DEV MEV	3.65	1
5-6		D. G. hYB'. POSVI. DEV MEV.	3.20, 3.07	2
7		D. G. hYB'. POSVI. DEV MEV.	3.73	1
8		D. G. hYB' POSVI. DEV MEV	3.90	1
9-11		D. G. hYB' POSVI. DEV MEV.	4.02, 3.83, 3.49	3
12-21		details illegible	3.73, 3.53, 3.50, 3.44, 3.34, 3.27, 3.25, 3.22, 3.16, 2.87	10

		All cusps fleured except two above head, annulet stops:		
22		D·G° rest illegible POSVI° ·DEV MEV°	3·38	1
23		D·G° rest illegible POSVI° ·DEV MEV	3·33	1
24		details illegible	3·58	1
	D	All cusps fleured except two above head, annulet stops, always D·G°, unbarred II _s unless stated:		
25		POSVI DEV MEV°	3·81	1
26-7		POSVI ·DEV MEV°	3·82, 3·69	2
28		POSVI ·DEV MEV° C for E on reverse	2·85	1
29		details illegible	3·52	1
		II on reverse:		
30-1		POSVI ·DEV MEV° TAS:	3·40, 2·87	2
32		POSVI DEV --- EM° ME·V	3·87	1
	E	All cusps fleured except two above head, annulet stops, unbarred II _s unless stated:		
33-6		POSVI ·DEV MEV°	3·90, 3·39, 3·34, 3·18	4
37-43		POSVI ·DEV MEV°	3·77, 3·64, 3·48, 3·44, 3·31, 3·13, 3·07	7
44-5		details illegible	3·94, 3·58	2
		II on reverse:		
46-7		POSVI ·DEVM MEV°	3·77, 3·53	2
48		details illegible but LOM DOM	3·33	1
49		details illegible	3·59	1
50	F/E	POSVI° unbarred II _s in LOII DOII	3·60	1
	F	All cusps fleured except two above head, annulet stops:		
51		POSVI ·DEVM LOII under POSVI	3·96	1
52-3		POSVI ·DEVM CIVI under POSVI	3·42, 3·11	2
54		POSVI ·DEVM CIVI under POSVI	3·70	1
55		details illegible	3·36	1
	G a	All cusps fleured, annulet below bust, obverse reads h ^v :		
56-9		POSVI ·DEVM annulet below CIVI	3·92, 3·86, 3·23, 3·21	4
60		POSVI ·DEVM annulet below TAS	3·67	1
61		two annulets below bust, annulet below CIVI	3·85	1
	b	All cusps fleured except two above head, annulet stops:		
62-4		POSVI ·DEVM annulet below DON, II unbarred	4·07, 3·74, 3·51	3
	f	All cusps fleured except two above head, large annulet stops:		
65		POSVI DEVM annulet below DON, II unbarred T·A·S	3·46	1
	e or f/g	Large annulet stops on obverse, saltire stops on reverse:		
66		POSVI ·DEVM	3·64	1
<i>Treaty Period</i>				
		All cusps fleured, double annulet stops on obverse, single saltire stops on reverse:		
67		POSVI° ·DEVM DEI: G:	3·65	1
<i>Post-Treaty Period</i>				
		All cusps fleured, double saltire stops, pellet at each side of central fleur:		
68		EDWARD:DI:GRA:REX:ANGL:----- *POSVI ·DEVM·A· DIVTOR· M·MEVM· CIVI TAS LOII DOII	3·64	1

YORK

Pre-Treaty Period

69	E/D	D·G· hVB for TAS	POSVI· DEVM MEV TAO	3-75	1
70-2	E	D·G· hVB	POSVI DEVM	3-99, 3-59, 3-15	3
73		D G hVB	POSVI DEVM EM·MEV	3-38	1

HALF-GROATS

All of these coins are very badly worn and severely clipped so that few details of the legends are visible.

LONDON

Pre-Treaty Period

74-9	C	All cusps fleured		1-88, 1-84, 1-83, 1-51, 1-47, 1-44	6
80-9		All cusps fleured except above head		1-87, 1-83 (2), 1-77, 1-72, 1-47, 1-45, 1-40, 1-32, Guildford (1)	10
90-4	D	All cusps fleured except above head		1-81, 1-54, 1-32, 1-26, 1-23	5
95-6	E	All cusps fleured except above head		1-81, 1-40	2
97	F/G	All cusps fleured except above head, large annulet stops on reverse		1-83	1
98	G a	All cusps fleured, annulet below bust		1-59	1
99	b/c	All cusps fleured, double annulet stops on obverse, saltire stops on reverse		1-64	1

Treaty Period

100		All cusps fleured, annulet before unbarred A in ADIVTORE	EDWARDVS:	2-20	1
101-2		barred A in ADIVTORE		1-63, 1-46	2

YORK

Pre-Treaty Period

103-4	E	All cusps fleured except above head		1-77, 1-41	2
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PENNY

YORK

Pre-Treaty Period

105	G ?f	Double struck, large N in ANGL , large annulet stops, tiny pellet beside trefoil of pellets in CIVI quarter probably accidental		Guildford (1)	1
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RICHARD II

GROAT

Late issue with broken **I** in **POSVI**

All cusps fleured, double saltire stops, base of **R** of **RICARD** just visible.

106		*R-----EX:ANGL:Z:FRANCIE POSVI DEVM:TA-----		3-65	1
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HENRY V

GROATS

107	H IV/A	Obverse die of Henry IV as BM coin 1950/6/6/68 with filled-in annulet to left of crown and pellet above the crown at right as there was no room on the die in the usual position at the right of the crown *HENRIC DI GRA REX ANGLIE X FRANC *POSVI DEVM A DIVTOR E MEVM CIVI TAS LON DON		1
108	A	*HENRIC DI GRA REX ANGLIE X FRANC(?) *POSVI DE--- DIVTORE M MEVM	3-35	1
109-11	C	*HENRIC----- X FRANCE (two dies) *POSVI DEVM A DIVTOR E MEVM	3-70, 3-68, 3-67	3
112-61		*HENRIC DI GRA REX ANGLIE X FRANC' *POSVI DEVM A DIVTOR E MEVM (reading FRANC', 27; FRANC, 6; uncertain, 17) (Form of initial cross often illegible)	3-90, 3-85 (2), 3-84 (2), 3-83, 3-81 (4*), 3-80, 3-77 (3), 3-76 (4), 3-75 (4), 3-74 (2), 3-73 (5), 3-72 (5), 3-71 (3), 3-70 (2), 3-69, 3-68, 3-66, 3-62, 3-59, 3-58, 3-55, 3-46, 3-32, 3-29, 2-64	50
162-3		As above except saltire not quatrefoil after POSVI	3-78, 3-64	2
164		As above except no saltire after POSVI, different die from BM coin ex Walters sale lot 280	3-81*	1
PENNY YORK				
165	C	Very worn TAS*	0-71	1

HENRY VI

NOBLES

LONDON

	Annulet Issue			
166		Obverse, trefoil stops with lis after HENRIC Reverse, annulet stops with mullet after IH'C HENRIC DI GRA REX ANGL' X FRANC' DNS RYB' IH'C AVT' TRANSIENS PER MEDIUM ILLORV' IBAT small H in centre of reverse	Whitton 7c 6-98	1
167		As above but large H in centre of reverse	Whitton 3a 6-96	1

QUARTER NOBLE

LONDON

168	Annulet Issue	Obverse, trefoil stops with lis after HENRIC Reverse, annulet stop with mullet after EXALTABITVR HENRIC DI GRA REX ANGL' lis over shield EXALTABITVR IN GLORIA	Whitton 1c 1-73	1
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GROATS
LONDON

Annulet Issue

169-91	ANGLIE fleur on breast	3-85, 3-84, 3-83, 3-82 (2), 3-81, 3-79 (2), 3-75, 3-74, 3-73 (2), 3-72 (2), 3-71, 3-70, 3-69, 3-62, 3-43, 3-34, 3-01, 3-00, 2-92	23
192-6	ANGLIE no fleur on breast	3-86, 3-81, 3-71, 3-70, 3-56	5
197-206	ANGL no fleur on breast	3-83, 3-81, 3-79, 3-78, 3-76, 3-75, 3-74, 3-73 (2), 3-36	10

Rosette-Mascle Issue

207†	Obverse die of Annulet Issue: *HENRIC DI GRA REX ANGLI & FRANC *POSVI DEVM A DIVTOR E MEVM CIVI TAS LON DON E over inverted E in ADIVTORE , mascle of small size from half-groat fount	Whitton 13e 3-78*	1
208	*HENRIC DI GRA rest of legend off flan *POSVI DEVM A DIVTOR E MEVM CIVI TAS LON DON O of DON over same letter turned through 90°	Whitton 16 3-21	1

Pinecone-Mascle Issue

209	Obverse of Rosette-Mascle Issue: *HENRIC DI GRA REX ANGLI & FRANC *POSVI DEVM A DIVTOR E MEVM CIVI TAS LON DON	Whitton 17e 3-88	1
210†	As above except A over O in TAS	3-82*	1
211-21	*HENRIC DI GRA REX ANGLI & FRANC *POSVI DEVM A DIVTOR E MEVM CIVI TAS LON DON	Whitton 18 a or b 4-04, 3-89, 3-88 (2), 3-86, 3-85, 3-78, 3-77, 3-75, 3-68, 3-64	11
222	As above except TA over OS in TAS , different die from coin with same error in BM, 1935-4-1-6260	3-78	1
223	As general type except I over O in ADIVTORE	3-83*	1
224	As general type except CIVI TAS LON DON	Whitton 19b 3-79	1

Leaf-Trefoil Issue

225†	Reverse of Leaf-Mascle Issue: *HENRIC DI GRA REX ANGLI & FRANC *POSVI DEVM A DIVTOR E MEVM leaf below last M CIVI TAS LON DON L over D in LON and TAS over LON same reverse die as Whitton 20b	Whitton 23a/20b 3-85*	1
226	*HENRIC DI GRA REX ANGLI & FRANC leaf on breast *POSVI DEVM A DIVTOR E MEVM	Whitton 22e 3-80	1

227-32	*HENRIC·DI·GR·REX·ANGLI·FR· - leaf on breast *POSVI DEVM·A DIVTOR E·MEVM CIVI TAS UON DON·	Whitton 25a	3-96, 3-89, 3-81 (2), 3-76, 3-75	6
233-6	As above except no leaf on breast	Whitton 26a	3-87, 3-86, 3-85, 3-83	4
237†	*HENRIC·DI·GR illegible REX·ANGLI·FR·FRANC *POSVI DEVM·A DIVTOR E·MEVM CIVI TAS UON DON no marks in inner legend	Whitton 24a	3-85*	1
Trefoil Issue				
238-9†	*HENRIC·DI·GR·REX·ANGLI·FR·FRAN leaf on breast, trefoil at each side of neck *POSVI DEVM·A D----R E·MEVM CIVI TAS UON DON no marks in inner legend, one die has letters centrally placed in each quarter but other has space after DON as if a mark had been allowed for	Whitton 32c	3-91, 3-85*	2
Leaf-Pellet Issue				
A	Leaf on breast, no fleur, pellet at each side of crown. The following five coins are all from the same obverse die but each reverse is different:			
240-1	*HENRIC·DI GR·REX ANGLI·FR·FRANC· C and saltire are punched onto the die over the initial cross POSVI DEVM·A DIVTOR E·MEVM extra pellet below CIVI and UON	Whitton 43a	3-85, 3-76	2
242-4 (243†)	As above except extra pellet below TAS and DON	Whitton 43b	3-92, 3-85*, 3-76	3
B	Leaf on breast, almost on top of fleur on cusp, pellet at each side of crown:			
245†	*HENRIC·DI GR·REX·ANGLI·FR·FRANC *POSVI DEVM·A DIVTOR E·MEVM extra pellet below CIVI and UON same reverse die as Whitton 65a, pl. VII, 9; same obverse die as next coin	Whitton 46a/65a	3-86*	1
246	Obverse as above, same die POSVI DEVM·A DIVTOR E·MEVM extra pellet below CIVI and UON	Whitton 46d	3-47	1
247-8	As above, different obverse die, except extra pellet below TAS and DON	Whitton 46-	3-86*, 3-77	2
C	Leaf on neck, fleur on cusp, pellet at each side of crown; no marks in reverse legends unless stated:			
249	*HENRIC·DI GR·REX·ANGLI·FR·FRANCI extra pellet below CIVI and UON	Whitton 53e	3-91	1
250	As above except extra pellet below TAS and DON	Whitton 53f	3-89*	1
251-2	As above except ADIVTORE·	Whitton 53f	3-84, 3-82	2
253-5	*HENRIC·DI GR·REX·ANGLI·FR·FRANC extra pellet below CIVI and UON	Whitton 57b	3-93, 3-86, 3-85	3
256-9	As above except extra pellets on inner circle	Whitton 57c	3-92, 3-90, 3-84, 3-81	4
260	As above except DI·	Whitton 57-	3-91	1

261-2	*HENRIC*DI GRA*REX*ANGLI*\S*FRANC Whitton 57d 3-84, 3-60 2 extra pellet on line below TAS and DON
263-4	As above except HENRIC* Whitton 57- 3-92, 3-76* 2
265	As above except ANGLI*\S*FRANC Whitton 59- 3-94 1
266	As No. 261 but position of pellets uncertain 3-87 1
267-70	*HENRIC*DI GRA*REX*ANGLI*\S*FRANC all same obverse die extra pellet below CIVI and UON Whitton 58/57b 3-84, 3-76 (2), 3-67 4
271-2	As above, same obverse die, except extra pellet below TAS and DON Whitton 58/59 3-89, 3-83* 2
273	*HENRIC*DI GRA*REX*ANGLI*\S*FRANC extra pellet below CIVI and UON Whitton 59/60d 3-87 1
274-7	As above except GRA* , all same obverse die, and extra pellet below TAS and DON Whitton 59 (var.) 4-00, Guildford (1), 3-85, 3-81 4
278†-9	*HENRIC*DI GRA*REX*ANGLI*\S*FRANC* , same obverse die, C and saltire over initial cross extra pellets not visible, possibly on line below CIVI and UON 3-93*, 3-95 2
280-3	*HENRIC*DI GRA*REX*ANGLI*\S*FRANC* extra pellets on inner circle below TAS and DON , one un- certain Whitton 61 (var.) 3-91, 3-88, 3-78, 3-80 4
284	*HENRIC*DI GRA*REX*ANGLI*\S*FRANC extra pellets on inner circle below CIVI and UON Whitton 62c 3-89 1
285-6	As above, same obverse die, except extra pellets on inner circle below TAS and DON 3-79, 3-35 2
287-8	As above except different obverse die 3-94, 3-84 2
289	As above except DI' 3-88 1
290	As above DI or DI' 3-85 1
291†	As above except FRANC' , small C from half-penny fount used to fit available space before initial cross 3-76* 1
292-5	As above, pellets uncertain 3-88, 3-82, 3-79, 3-78 4
CALAIS	
	Annulet Issue
296-426	ANGLIE fleur on breast 4-00, 3-96, 3-94 (2), 3-92, 3-91 (2), 3-88 (2), 3-87, 3-86 (2), 3-85 (4), 3-84 (5), 3-83, 3-82 (3), 3-81 (8), 3-80 (7), 3-79 (7), 3-78 (3), 3-77 (6), 3-76 (4), 3-75 (7), 3-74 (5), 3-73 (3), 3-72 (2), 3-71 (4), 3-70 (2), 3-69 (4), 3-68 (5), 3-67 (6), 3-66, 3-65, 3-64 (2), 3-63, 3-62, 3-61 (2), 3-59, 3-57, 3-52, 3-48, 3-46, 3-41, 3-37, 3-30, 3-29, 3-24 (2), 3-23, 3-20, 3-19, 3-16, 3-12, 3-11, 3-07, 3-04, 3-03, 3-02, 2-95, 2-90, 2-77, Guildford (1) 131
427-34	ANGLIE no fleur on breast 3-82, 3-81 (3), 3-78, 3-32, 3-29, 3-17 8
435†-673	ANGLI no fleur on breast, POSVI* 4-17*, 3-97, 3-92, 3-91, 3-90, 3-89 (3), 3-88 (5), 3-87, 3-86 (6), 3-85 (6), 3-84 (6), 3-83 (10), 3-82 (11), 3-81 (14), 3-80 (12), 3-79 (14), 3-78 (12), 3-77 (18), 3-76 (7), 3-75 (13), 3-74 (9), 3-73 (8), 3-72 (9), 3-71 (7), 3-70 (7), 3-69 (5), 3-68 (7), 3-67 (3), 3-66 (3), 3-65, 3-64, 3-63 (2), 3-62, 3-61 (2), 3-60, 3-52, 3-51, 3-47, 3-46, 3-43, 3-41 (2), 3-39, 3-35, 3-34, 3-33, 3-32, 3-30, 3-27 (2), 3-26, 3-21, 3-20, 3-18, 3-17, 3-16, 3-13, 3-12, 3-11, 3-09, 3-05, 2-97, 2-94 (2), 2-73 239
674-6	ANGLI no fleur on breast, trefoil to left of crown and after POSVI , annulet in CALI quarter only 3-89, 3-76, 3-17 3
677-8	As above except no trefoil to left of crown (normal Annulet obverse die), both same obverse die 3-83, 3-40 2

Rosette-Mascle Issue

		Reverses read *POSUI DEVM A DIVTOR E MEVM and VIL U A CALI SIE unless stated	
		Obverse dies of Annulet Issue	
679-86	*HENRIC DI GRA REX ANGL S FRANC' VIL U A CALI SIE	Whitton 13c	3-87, 3-85, 3-83, 3-79, 3-74, 3-67, 3-63, 3-58
687-8	*HENRIC DI GRA REX ANGL S FRANC'	Whitton 15b	3-89, 3-35
689	As above except A over A inverted in CALI		3-80*
690†	*HENRIC DI GRA REX ANGL S FRANC' Mascle in two spandrels		
	VIL U A CALI SIE	Whitton 16a	3-86*
691-2	*HENRIC DI GRA REX ANGL S FRANC	Whitton 19	3-87, 3-70*
693-4	*HENRIC DI GRA REX ANGL S FRANC'	Whitton 21	3-82, 3-79
695	As above except M for R in ADIVTORE on reverse, same dies BM coin 1871-8-4-173 ex Stamford hoard		3-77
696	*HENRIC DI GRA REX ANGL S FRANC	Whitton 22	3-23
697	*HENRIC DI GRA REX ANGL S FRANC'	Whitton 23	3-75
698-736	*HENRIC DI GRA REX ANGL S FRANC	Whitton 24a	3-90, 3-89, 3-87 (2), 3-86, 3-85, 3-84 (2), 3-83 (2), 3-82 (3), 3-81, 3-80 (5), 3-79 (2), 3-78 (3), 3-77 (3), 3-75, 3-74 (2), 3-72 (2), 3-70, 3-67, 3-42, 3-30, 3-26 (2), 3-25
737	*HENRIC DI GRA REX ANGL S FRANC' die reading ANG not in Whitton but same as BM coin 1935-4- 11-6740 (different reverse die)		3-78
738-805	*HENRIC DI GRA REX ANGL S FRANC	Whitton 26a	3-95, 3-92 (2), 3-90, 3-89, 3-88, 3-87 (2), 3-85 (3), 3-84 (4), 3-83, 3-82 (4), 3-81 (7), 3-80, 3-79 (5), 3-78 (2), 3-77 (2), 3-76 (3), 3-75 (4), 3-74 (4), 3-73 (2), 3-72, 3-71, 3-69, 3-68 (3), 3-66, 3-65, 3-62, 3-60, 3-59, 3-58, 3-55, 3-43, 3-22, 3-20, 3-09, 2-95
806	As above except E over V in MEVM		3-87*
807	E over V in DEV M		3-83*
808	* over E in MEVM		3-76*

809	D over A in DIVTOR	3-78*	1
810	E over inverted E in DEVM	3-63*	1
811†	V over C in VII	3-01*	1
812	I over E in DIVTOR	3-84*	1
813	T over M in DIVTOR	3-69*	1
814	obverse reads REX◊RANGL	3-75*	1

Pinecone-Mascle Issue

	Reverses read POSVI◊ DEVM: A DIVTOR E: MEVM and VII ◊ LA: CAUI SIE◊ unless stated		
815-16	Obverse of Rosette-Mascle Issue: *HENRIC◊DI◊GRA◊REX◊ANGL◊S◊FRANC	Whitton 26e	3-83, 3-66
817-18	As above except VII ◊ LA CAUI SIE◊	Whitton 26g	3-85, 3-40
819-20	Reverse of Rosette-Mascle Issue: *HENRIC◊DI◊GRA◊REX◊ANGL◊S◊FRANC VII ◊ LA: CAUI SIE◊	Whitton 28c	4-43, 3-77
821-9	*HENRIC◊DI◊GRA◊REX◊ANGL◊S◊FRANC VII ◊ LA CAUI SIE◊	Whitton 28g	3-91, 3-90, 3-88, 3-87, 3-86 (2), 3-82, 3-81, 3-78
830-908	As above but normal reverse	Whitton 28d or 30a	4-07, 4-03, 3-99, 3-97, 3-94 (2), 3-93, 3-92 (5), 3-91 (3), 3-89 (3), 3-88, 3-87 (2), 3-86, 3-85 (4), 3-84 (6), 3-83 (4), 3-82, 3-81 (4), 3-80 (3), 3-79, 3-78 (2), 3-77, 3-76, 3-75 (2), 3-74 (3), 3-73, 3-71 (2), 3-70 (4), 3-69 (2), 3-68 (3), 3-66 (2), 3-65, 3-64 (3), 3-60 (2), 3-56, 3-51, 3-37, 3-11, 3-03
909	As above except hENIC, same reading but different die from BM coin 1935-4-1-6308 ◊ over C in ◊ LA:	Whitton 28d	3-85*
910	As normal except hRC for hENRIC, same die as BM coin 1922-6-19-13	Whitton 28d	4-04
911	As normal except extra pinecone punched in error over C in hENRIC	Whitton 80a	3-89*
912	As normal except VIV for VII	Whitton 28d or 30a	3-86*
913†	As normal except O over P in POSVI	Whitton 28d	3-72*
914	Leaf-Mascle Issue *HENRIC◊DI◊GRA◊REX◊ANGL◊S◊FRAN(NC) Leaf in spandril below bust *POSVI DEVM: A DIVTOR E: MEVM VII ◊ LA: CAUI SIE* leaf below MEVM	Whitton 32a	3-78
915†	As above except N over R in hENRIC		3-81*

Trefoil Issue

- 916† Obverse as Pinecone-Mascle Issue, reverse as Trefoil (or possibly Leaf-Trefoil) Issue:
***HENRIC DI GRA REX ANGLI S FRANC**
***POSVI DEVM A DIVTOR EMEVM**
VII LU CAU SIE CAU over SIV Whitton 30g 3-93* 1

HALF-GROATS

LONDON

Annulet Issue

- 917 Nine arcs, initial cross 2, small face **POSVI**
ANGLI S FR 1-55 1
CIVI TAS LON DON
 918 As above except cross 5, R' and R over cross, 1-87 1
CIVI TAS LON DON
 919 Nine arcs, initial cross 5, large face
CIVI TAS LON DON 1-86 1
 920-1 As above except **CIVI TAS LON DON** 1-86, 1-70 2

Pinecone-Mascle Issue

- 922 ***HENRIC DI GRA REX ANGLI S FR**
***POSVI DEVM A DIVTOR EMEVM**
CIVI TAS LON DON Whitton 19 1-92 1

Leaf-Pellet Issue

- 923† Obverse of Leaf-Trefoil Issue:
 Leaf on breast, no pellets by crown, seven arches
 to tressure, initial cross IIb
***HENRIC DI GRA REX ANGLI S FR**
POSVI DEVM A DIVTOR EMEVM
CIVI TAS LON DON extra pellet below **TAS** and **DON**
 Same dies as Whitton 31, Pl. VIII, 6 1-90* 1
 924† Normal Leaf-Pellet obverse
***HENRIC DI GRA REX ANGLI S FR**
POSVI DEVM A DIVTOR EMEVM
CIVI TAS LON DON extra pellet below **CIVI** and **LON**
 Whitton 35b 1-98* 1
 925† As above, same obverse die, except extra pellet below **TAS**
 and **DON** 1-90* 1

CALAIS

Annulet Issue

- 926-8 Nine arcs, initial cross 2, small face, no initial cross on reverse
ANGLI S FR 1-96, 1-77, 1-74 3
 929-31 **ANGLI S FR** 1-86, 1-85, 1-80 3
 932-57 **ANGLI S FR** (one holed, 1-81) 1-96, 1-93,
 1-89 (2), 1-86 (3),
 1-85 (2), 1-84 (2),
 1-83, 1-82,
 1-81 (2), 1-80 (2),
 1-79, 1-78 (2),
 1-77, 1-76, 1-75,
 1-72, 1-53, 1-47 26
 958 As above except **A** over **D** in **ADIVTORE** 1-83* 1
 959-61 **ANGLI S FR** 1-86, 1-84, 1-83 3
 962 Initial cross 5, small face
ANGLI S FR 1-44* 1
***POSVI DEVM A DIVTOR EMEVM**

963	Initial cross 5, large face, no initial cross on reverse ANGL'X'FR	1-85*
964-7	Initial cross 5, large face ANGL'X'FR *POSVI DEVM: A DIVTOR E' MEVM	1-91, 1-81, 1-80, 1-78
968-75	ANGL'X'FR	1-93, 1-87, 1-86, 1-84 (2), 1-79, 1-76, 1-72

Rosette-Mascle Issue

976	Obverse of Annulet Issue: ANGL'X'FR *POSVI DEVM: A DIVTOR E' MEVM VII L' A' CAU IS'	Whitton 13e 1-84
977	Rosette-Mascle obverse with mascles in two spandrels *HENRIC' DI' GRA' REX' ANGL'X'FR *POSVI DEVM: A DIVTOR E' MEVM VII L' A' CAU SIE'	Whitton 16 1-81
978-9	Reverse as above *HENRIC' DI' GRA' REX' ANGL'X'FR	Whitton 18 1-78, 1-71
980	Reverse as above *HENRIC' DI' GRA' REX' ANGL'X'FR	Whitton 20 1-80
981-4	Reverse as above *HENRIC' DI' GRA' REX' ANGL'X'FR	Whitton 21 1-88, 1-84, 1-83, 1-57

Pinecone-Mascle Issue

*HENRIC' DI' GRA' REX' ANGL'X'FR	Whitton 27b 1-87
same obverse die as BM coin 1914-5-15-37 and Whitton 27b, pl. VI, 4	

SCOTLAND

ROBERT II

HALF-GROAT EDINBURGH

986	Six-arched tressure, trefoils in spandrels, nothing behind head *ROBERTVS DEI GRA REX SCOTOR *DNS PROT ECTOR MEVS VILL AED INBV RGH	Stewart 68 1-41*
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LUXEMBURG

JEAN L'AVEUGLE

STERLING

987	Worn almost flat, traces of letters EDI REX on obverse and GES on reverse for obverse cf. Chautard 176 0-62*	
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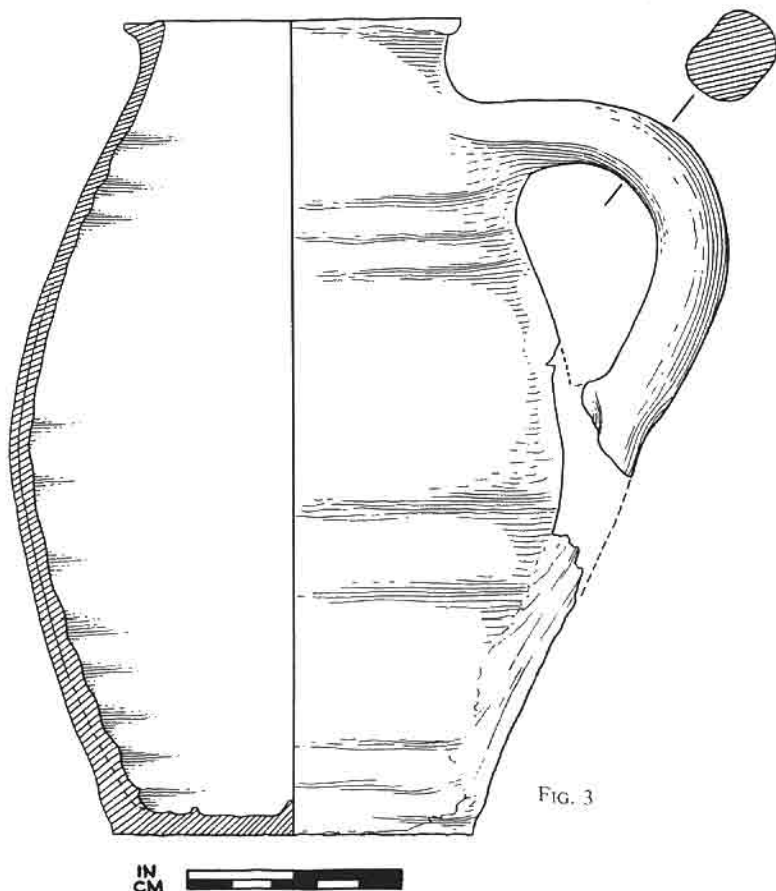
APPENDIX

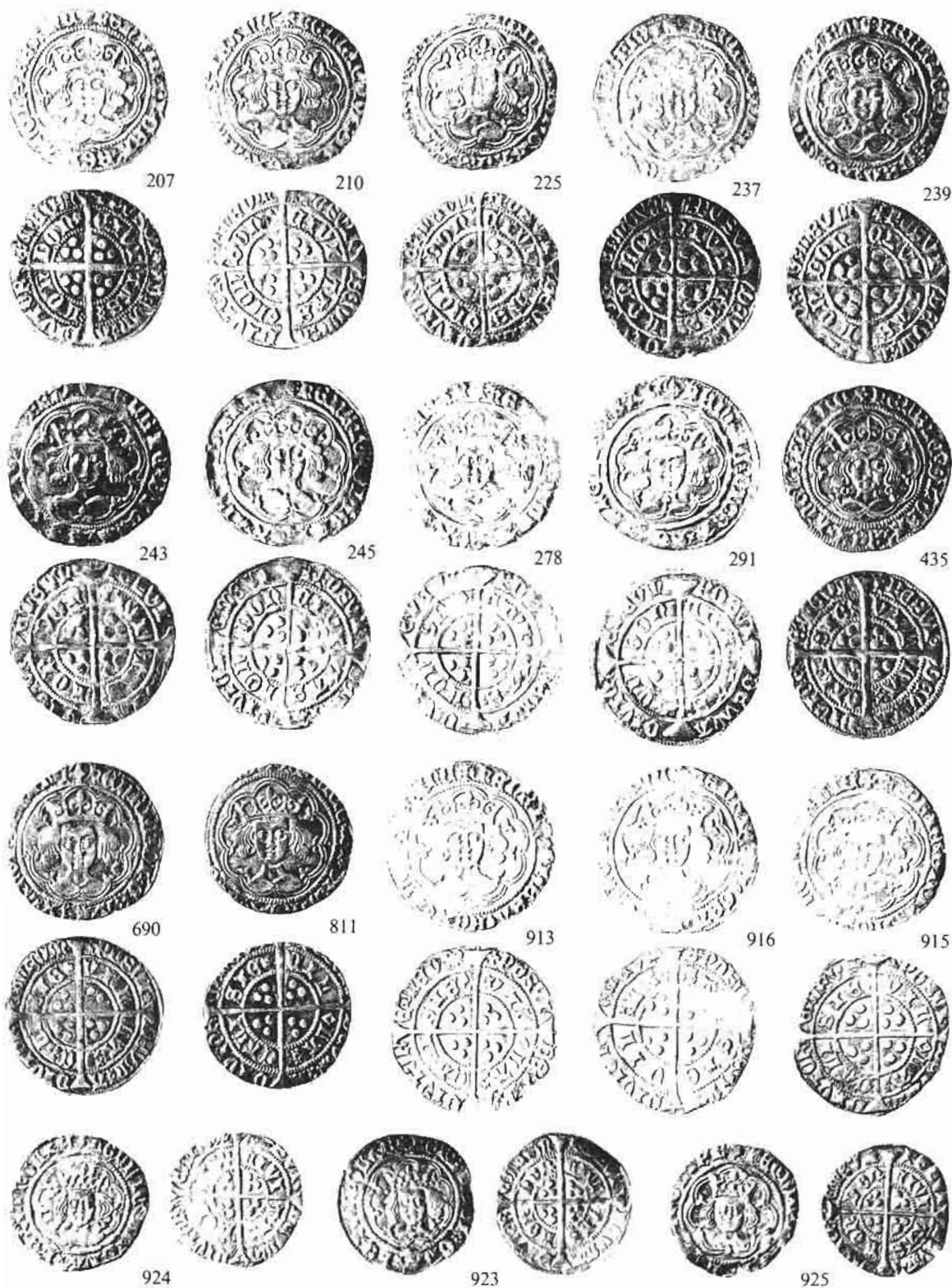
THE POT CONTAINING THE REIGATE HOARD

J. CHERRY

The Reigate hoard was found in a pottery jug which provides a further example of a fifteenth-century pot dated by a coin hoard.¹ The jug (see Fig. 3) was broken on discovery though the entire base, rim, and most of the handle remain. It is made of a pinkish buff ware which includes a considerable amount of grit and the side wall of the pot is built up of two skins of clay. It is decorated with a splash of green glaze on the front, and is very similar to the products of the Cheam Kiln though the Cheam fabric is usually finer. The distance from Cheam to Reigate is about 10 miles in a direct line. The pottery from Cheam is normally given a wide date range in the fourteenth and fifteenth centuries and a pot whose date of deposit is known is therefore valuable.

¹ Other fifteenth-century pots are those from Wyre Piddle (deposited c. 1467—see *NC* 1970, 133) and Terrington St. Clement (deposited c. 1425—see *NC* 1948, 183). The last was also found in a jug probably made at Cheam.





ARCHIBALD: REIGATE HOARD

SILVER TOKENS AND BRISTOL

JAMES O'DONALD MAYS

COINS always have provided valuable insights into histories of nations and few examples of this truth probably can surpass that of the silver token coinage of Bristol (1811–14) as a reflection of the British experience during the Industrial Revolution.

Tokens had appeared in Britain in the seventeenth and eighteenth centuries, but on both occasions they were struck mainly in copper, and in minor denominations. Those that circulated during 1811–14 in Bristol, and about a hundred other places in England and Wales, differed in two important respects from their predecessors. First, they were struck mainly in silver, and second, they embraced denominations extending right up to a crown. Two towns, Reading and Sheffield, even boasted tokens in gold.

The daring with which traders openly defied the government of the day by issuing silver tokens to compete with the coin of the realm, however inadequate it may have been, is remarkable. 'Striking private currency in a precious metal,' one scholar rightly points out, 'was a far bolder breach of the royal prerogative . . . than issuing copper.'¹ It mattered not that the government had issued very little coinage during the reign of George III, or for whatever reason—the high price of silver and preoccupation with foreign wars being two excellent ones. Technically the monopoly to strike coins remained with the government and anyone who challenged this right, in theory, would lay himself open to grave charges.

Not all silver tokens are dated, but among the earliest to appear were those of Neath (dated 12 March 1811) and Shaftesbury (dated 14 March 1811). Their issuers no doubt were apprehensive at first, but it soon became apparent that London either was disinterested or was turning a blind eye to the event. Soon the flood-gates were loosed and a silver token mania spread rapidly to most parts of England and Wales.² Scotland, oddly, took no part in the 1811–14 silver token movement.

It is worth pondering the circumstances in Britain that led to the issuance of silver tokens, and why Bristol's experience was especially significant. The Industrial Revolution was in full bloom and was having profound effects upon the nation. The year 1811, a census year, revealed that Britain's population had topped 12 millions for the first time. Although the increase over the previous census was large (nearly 14 per cent), the most significant fact arising from the new census was the shifting of the population from rural to urban areas. This move greatly facilitated the issuance of silver tokens by the growing class of traders.

The ancient agrarian-based economy had been eclipsed; more families (1,120,000) were now engaged in trade, manufacturing and the crafts than in agriculture

¹ Peter Mathias, *English Trade Tokens* (1962), p. 25.

² A scattering of silver tokens appeared between 1797 and 1811 outside England and Wales, among them the

Dundee (1797) and Dublin (1804) shillings and the Guernsey (1809) crown.

(896,000).³ The shift away from the land meant that towns and cities were booming, and that the small trader operated under almost ideal conditions. The clientele was there for the cultivation, and country banks had plenty of capital to lend. But there was one serious drawback for the trader: a lack of small change with which to conduct his business. The shilling was undoubtedly the most useful coin, closely followed by the sixpence, and very few of either existed in acceptable condition.

T. S. Ashton describes the dilemma which faced manufacturers and others when they came to make up the weekly wage packets of employees: 'Many of them spent days riding from place to place in search of shillings.'⁴ More ingenious still was the plan, described by the same author, whereby a cotton-spinner paid wages to a third of his workers and sent them off to make their weekly purchases; after an hour or two he collected the coins from the town's shops and repeated the process with each of the remaining one-third of his workers.

Another factor that made 1811 a memorable year ('the worst . . . for Britain economically')⁵ was the difficulty of industry, large and small, in adjusting to the lull in the Napoleonic Wars. Country banks, hitherto prosperous, found themselves in increasing difficulty. In 1810, the year before the silver token movement began, there were 783, but by 1814, when the tokens were declared illegal, the number had dropped to 733, and would not again reach 700.⁶ Paper currency had been issued freely by these enterprising country bankers, but how would the public respond in more difficult times? 'The continuous inflation of the war period had stimulated expansion,' explained J. Steven Watson, '[but] a contraction of demand could not but put severe strain upon the monetary system.'⁷ The wild fluctuation of the economy convinced the labourer, whose weekly earnings were about 10 to 12 shillings, that he should be paid in coin of the realm or some other coin of high intrinsic value. Bank of England tokens first appeared in 1811, but their denominations of 18 pence and 3 shillings were not ideal values for the small trader. In any case, large quantities were hoarded or melted down for their silver content. Thus the working man, in good times and bad, was deprived of adequate small change he could trust, and to him it appeared that no one cared about his plight.

If the working man was powerless to do anything about his situation, the small trader—if he survived bankruptcy—was better placed. Provided he was efficient and was established in his community, he could count on financial backing from either his local bank or wealthy individuals. For those merchants who succumbed to bankruptcy during the turbulent years which began in 1811 the wretched state of the coin of the realm undoubtedly played a role in their demise; many offered credit when there were no coins available, and continuous credit proved the direct road to bankruptcy.

Such was the pot-pourri of social and economic conditions when Britain gave birth to its silver token series of 1811–14. Bristol's population was 71,000, making it the

³ Statistics taken from tables in *Abstract of British Historical Statistics* (1971) by B. R. Mitchell and Phyllis Deane.

⁴ T. S. Ashton, *The Industrial Revolution* (1972 edn.), p. 80.

⁵ J. Steven Watson, *The Reign of George III 1760–1815* (1960), p. 468.

⁶ L. S. Presnell, *Country Banking in the Industrial Revolution* (1956), as gathered from the *British Parliamentary Papers* for the years cited. ⁷ Watson, p. 469.

fourth largest provincial city after Liverpool, Manchester, and Birmingham.⁸ It did not have the concentration of manufacturing that Manchester and Birmingham boasted and its port activity was not so great as Liverpool's. But in most other respects Bristol was typical of the medium-sized English town suffering from growing pains, seeing new residents arriving daily, and possessing a vigorous trading class.

The advent of Bristol's silver tokens was heralded by public displeasure over the state of existing coinage. Newspapers spoke out openly against the evil. A succinct presentation of the problem, originally published in the *Taunton Chronicle*, appeared in the *Bristol Mirror* in August, 1811:

SCARCITY OF CHANGE—The total disappearance of Good Coin and the extreme difficulty of procuring Silver Change, continue to perplex, if not to alarm, every description of persons. The Bank [of England] Tokens have been so sparingly issued, that they have hitherto served rather to gratify curiosity than to administer to public convenience. In fact, unless some means are immediately adopted to remedy this daily . . . [increasing] evil, it will be impossible to execute the ordinary transactions of trade. The want of change is no longer merely an inconvenience, but a source of actual distress to thousands of traders and poor people; the former of whom are reduced to the alternative of giving credit, which they wish to avoid, or keeping their commodities in hand; and the latter are compelled to submit to purchases in which the liberty of choice is sacrificed to the necessity of the occasion. It is a serious fact, that several butchers and market people, on the last Taunton market day, declared their intention of withholding all supplies which were not indispensably required by their regular customers, while others avowed their determination to abstain from attending the market altogether.⁹

Although six Bristol firms issued silver tokens bearing names of traders, the number of firms which actually distributed tokens undoubtedly was greater, for the ubiquitous Henry Morgan left his mark here.¹⁰ The gamut of trades represented by the issuers reads like a listing of High Street shops in the nineteenth century: grocer, tea dealer, milliner, haberdasher, printer, laceman, watchmaker, jeweller, flax and twine manufacturer, medicine dealer, rag merchant, stationer, bookseller, silver-smith, ropemaker and, appropriately for Bristol, wharfinger. From the foregoing list, it will be readily apparent that some issuers were engaged in two or more trades simultaneously.

Bristol directories, newspapers, and broadsheets reveal the first names of some silver token issuers not recorded by W. J. Davis or Richard Dalton in their standard works.¹¹ One such was Edward Bryan, proprietor of the City Printing Office at 52 Corn Street (see Fig. 1) and a second shop at 15, Clarence Street. As a printer of broadsheets which recorded the emotional issues of the day, Bryan was very much a part of the Bristol scene. Several of his handbills are preserved in the Bristol Public Library; one particularly fascinating one, in the form of a poem, is a satire on the town's 1812 parliamentary election, and is entitled 'Bristol Grand Races'. By June of 1814 when Bristol prepared to join the rest of the nation in marking the proclamation of peace with France, Edward Bryan was dead. His widow duly carried on the family business and produced a broadsheet advertising the 'General Illumination' arranged for 27 June. Bryan thus did not live to the end of the period for which his silver tokens

⁸ Mitchell and Deane, op. cit.

⁹ *Bristol Mirror*, 3 Aug. 1811.

¹⁰ Peter A. Clayton, 'Henry Morgan, Token Manufacturer of Rathbone Place', *Cunobelin: The Yearbook of the British Association of Numismatic Societies* (1967).

¹¹ Richard Dalton (1854-1922) was himself a Bris-

tolian. For many years a director of the Imperial Tobacco group, he compiled the standard reference, *The Silver Token Coinage Mainly Issued between 1811 and 1812*. He was also a token collector. On his death Mrs. Dalton presented her husband's extensive collection to the Bristol City Museum.

(Dalton 21-2 and 53-4) were valid, and it is not known if their redemption caused his widow hardship. However, the City Printing Office was still in business in 1826 when Edward Cashin's water-colour showed the Corn Street premises (see Fig. 1).

Another issuer, Philip Rose, advertised himself on his shilling (Dalton 37) as a stationer, but he was also a printer. One of his broadsheets also survives in the Bristol library's collection and, like that of Edward Bryan's, takes the form of a political poem. Entitled 'The Blue Whig', it lists Rose's premises as being at 20 Broadmead.



FIG. 1. The City Printing Office from which Edward Bryan distributed his silver tokens (Courtesy Bristol Art Gallery)

William Sheppard was one of those enterprising Bristolians who conducted a wide range of business activities. The 1815 city guide lists him as being a stationer, bookseller, lottery operator, and owner of a patent medicine warehouse. His place of business was near the Exchange, thus assuring him a steady procession of prosperous clients. His own guide of Bristol, published a few years before his tokens were issued, carries a full page of patent medicines available from his shop: his cures bear such intriguing names as Balm of Mecca, Iceland Liverwort, Senate's Embrocation for

Worms, and Sicilian Bloom of Youth and Beauty.¹² Sheppard issued shillings (Dalton 49–50) and sixpences (Dalton 65); both denominations would have been useful in purchasing volumes from his bookshop, many of which sold for a shilling or one shilling and sixpence.

Niblock and Latham conducted an auctioneering business from their 'Commission Sales Room' at 18 Bridge Street, as well as a woollen drapery shop next door at no. 19. It was their predecessor, Niblock and Hunter, which issued the famous halfpenny tokens in 1795 (Davis 102–3) portraying two men in the midst of a conversation. The first said 'I want to buy some cheap bargains', to which the second replied, 'Then go to Niblock's, in Bridge Street'. Niblock and Latham indicate on their tokens (Dalton 47–8 and 63–4) that they also conducted business at Trowbridge.

Another enterprising trader who operated from two addresses in Bristol was Robert Tripp. He described himself in the 1815 city guide as an 'Army and Navy Taylor, Wholesale Draper, and Accoutrement Maker'. Tripp had one outlet at 1 Queen's Square, and the other—no doubt to tempt sea-faring men—on no. 37 Quay. His delightful shilling (Dalton 51) is the only silver token issued in Bristol depicting a sailing vessel, a splendid three-masted ship. Tripp's sixpenny piece (Dalton 66), as A. W. Waters points out, is unique for detailing its redemption value in dollars and pence.¹³

Mystery surrounds a Bristol sixpenny token (Dalton 60) whose issuer is shown as MORGANS WAREHOUSE FOR BUCK & DOE SKINS. A. W. Waters asks if the issuer could be a relation of Henry Morgan, whose name appears either as the maker or issuer of many silver tokens—including some Bristol ones. The 1811 Bristol directory is not helpful; it lists one John Morgan as a grocer at 38 Castle Street, but there is no Morgan shown in either the 1811 or 1812 directory who is in the skin trade. Could this token have been yet another piece of Henry Morgan's mischief?

Varied and fascinating though the circumstances of the foregoing silver token issuers may be, they pale when compared with the drama attending the coins issued by a consortium of five traders calling themselves the 'Bristol Commercial Token Company'. The five were Francis Garratt, Bristol Bridge; Francis Grigg, 34 High Street; Lancelot Beck, 27 Clare Street; Edward Bird, 16 Clare Street; and William Terrell, 17 The Back; their shillings are listed by Dalton as nos. 23–9, and the sixpences as nos. 55–6, but as will be seen the number of probable forgeries exceeds the legitimate varieties. Garratt was a grocer and tea dealer, Terrell a ropemaker and wharfinger, Bird a silversmith, Beck a milliner and haberdasher, and Grigg a haberdasher.

The Garratt group also issued a one-pound and a five-pound note from their 'Commercial Token Company'. Davis illustrates the pound note in his standard work and also describes the five-pound denomination, which was an unused specimen. Both of these, as well as an unused example of the pound note, are in the Bristol City Museum.

It was not until 2 January 1815, after silver tokens had been declared unlawful tender, that the public knew the full extent of the burden borne by Garratt and his friends to help keep commerce alive in Bristol. On that date they published their

¹² *The New Bristol Guide* (1804).

¹³ Arthur W. Waters, *Notes on the Silver Tokens of the Nineteenth Century* (1957), p. 12.

financial account. It revealed that the consortium had paid £28,337 for 640,000 shillings; the sum embraced both the cost of silver bullion and the manufacturer's charge. There is no mention of a sixpenny token, although two varieties are generally attributed to the Garratt group. The 640,000 pieces may well be the largest number of silver tokens distributed by one issuer in Britain, although the Birmingham work-house shilling is a possible contender for this distinction. The financial report does not give the manufacturer's name, but one point seems clear: Henry Morgan, the silver token 'super salesman', did not get the order.

Morgan, whose antics have been admirably documented by Peter Clayton,¹⁴ must have put in a tender for the huge order and, when he was unsuccessful, apparently sought revenge by issuing an undetermined number of spurious tokens. W. J. Davis, A. W. Waters, and Peter Clayton have identified most of these, and there is no point in describing them here. Suffice it to say that Morgan literally played with his dies, altering so little as a single letter in the names of Garratt and his friends, and sometimes the date of the token as well. To this day no one can be sure how many such forgeries Morgan issued. One specimen of the Morgan 'August 22' series of forgeries (the genuine Garratt tokens were dated



FIG. 2. Forgery by Henry Morgan, enlarged approximately $\times 2$

August 12) recently came to light with Edward Bird's name shown as EDW^N BIRD. No reference lists this type (see Fig. 2) nor is there one in the British Museum collection.

Garratt and his friends must have had problems enough redeeming their genuine tokens, and it is easy to imagine their consternation when confronted with Morgan's spurious pieces. Early in 1812 the consortium was obliged to advertise in the local press, calling attention to Morgan's forgeries and hinting that further measures against the culprit and his Bristol agent might be necessary if the 'infamous deceptions' did not cease.¹⁵

In Bristol, as in most other towns where silver tokens were issued, the general public was only too pleased to have small change. D. R. D. Edmunds has previously shown how citizens of Reading thanked J. B. Monck for issuing tokens in his town;¹⁶ similarly, Bristolians—among them trading rivals of the token issuers—asked Garratt and his friends not to call in their tokens when it seemed, in late 1812, that Parliament was about to put an end to their period of validity. Convening in Rummer Tavern, these citizens (calling themselves the 'Committee of Bristol Token Meeting') urged that the Garratt tokens be continued in circulation until 25 March 1813, and that, if necessary, a subscription be raised to indemnify Garratt and his co-issuers 'for any difference in the price of Dollar silver below its present value . . .'.¹⁷ A private citizen, writing under a pseudonym at about this time, asserted: 'I believe I can find

¹⁴ Clayton, *op. cit.*

¹⁵ *Bristol Mercury*, 22 Feb. 1812.

¹⁶ D. R. D. Edmunds, 'The Gold and Silver Tokens

Issued by John Berkeley Monck, 1811–1812', *BNJ* xxxv, 1966.

¹⁷ *Bristol Mercury*, 31 Oct. 1812.

three-fourths of the citizens of Bristol who will join me in the assertion that . . . [the issuance of tokens] was without exception the greatest alleviation to the distresses of the public for want of change that could be devised.¹⁸

News items and advertisements in the Bristol and Bath newspapers of 1811–14 confirm that silver tokens from either town were acceptable in both places. This willingness to accept tokens from nearby towns, and even from distant places, is borne out by D. R. D. Edmunds,¹⁹ and suggests that the public—once assured that a token contained a reasonable silver content, was not overly concerned about its provenance. A token that bore the issuer's name obviously was to be preferred to one without it.

Public confidence in silver tokens resided in the answer to a simple question: 'How can we tell if a token has a reasonable amount of silver in it?' If the token did not bear the name of its issuer (many did not), and contained no statement as to its silver content (few did), the public was at the mercy of the issuer. If he was known to be a reliable trader, then the chances were that his token was of acceptable quality. Happily for some towns, public-spirited citizens went to the trouble of analysing their tokens and publishing the results in the local press. Dr. C. Wilkinson of Bath did this for the silver tokens of his town and, on request, also undertook tests on several Bristol pieces.²⁰ His findings were printed by the *Bath Journal* on 3 February 1812. Wilkinson found that Edward Bryan's shilling had an intrinsic value of slightly more than 9½d., the Garratt consortium piece was worth just above 9¼d., and the Sheppard shilling's value was exactly 9d. The other Bristol shillings either had not appeared at the time of the analysis, or were not made available to Wilkinson.

Silver shilling tokens which had an intrinsic worth of 9d. or more were generally regarded as good value, leading Wilkinson to comment that the pieces he had examined from Bristol had a 'respectful proportion of silver' in them. He went on to say that this happy situation did not pertain to all parts of the country; in particular he cited two London shillings whose circulation, in his opinion, 'should be discouraged'. This pair, Wilkinson said, was the Warren's (the famous blacking firm), worth only 7½d., and Henry Morgan's, worth only 4½d.

Whitchurch and Dore, whose series of four-shilling tokens did much to alleviate the shortage of change in nearby Bath, took the unusual step of according recognition to the tokens of Bristol and four other towns in an advertisement of 14 May 1812. 'Whitchurch and Dore . . .', the notice said, 'purpose to continue to take in exchange for Goods at their respective Shops . . . the following Tokens, viz., those issued by the Marlborough Bank [38 miles distant], the Bristol, Andover [53 miles away] and Gloucester [35 miles] Tokens, [and] the Frome [22 miles] Tokens of one and two shillings each. . .'.²¹

W. J. Davis²² quotes another advertisement attesting to the acceptability of the Garratt-type tokens in nearby Bath. When a 'Grand Gala' was planned for

¹⁸ Felix Farley's *Bristol Journal*, 31 Oct. 1812 (letter signed 'Civis').

¹⁹ Edmunds, *op. cit.*

²⁰ Dr. Wilkinson, in the 25 Nov. issue of the *Bath Journal*, describes how he conducted his analysis of silver tokens. The process involved filing metal from a token, dissolving it in nitric acid, and diluting it with twice its

weight of water. The resulting black powder was dissolved in nitro-muriatic acid. To the nitric acid was added common salt after which the muriate of silver dried, and was weighed.

²¹ *Bath Chronicle*, 14 May 1812.

²² W. J. Davis, *Nineteenth Century Token Coinage* (1904; reprinted 1969), p. 98.

George III's birthday in Bath's Sydney Gardens, the notice stipulated 'No tokens taken but those of Messrs. Garratt & Co., Bristol; Messrs. Whitchurch & Dore, and Messrs. Culverhouse, Orchard & Phipps, Bath'.

When Garratt and his fellow token issuers compiled their final account in January 1815, they indicated that almost one third of their 640,000 shillings had not been returned for redemption by the 20 December deadline of the previous year. The published account seemed to assume that *all* the tokens would be redeemed and that the consortium, as a result, would incur a loss of some £5,588—primarily due to the drop in the price of silver. No doubt most of the 200,000 shillings outstanding were

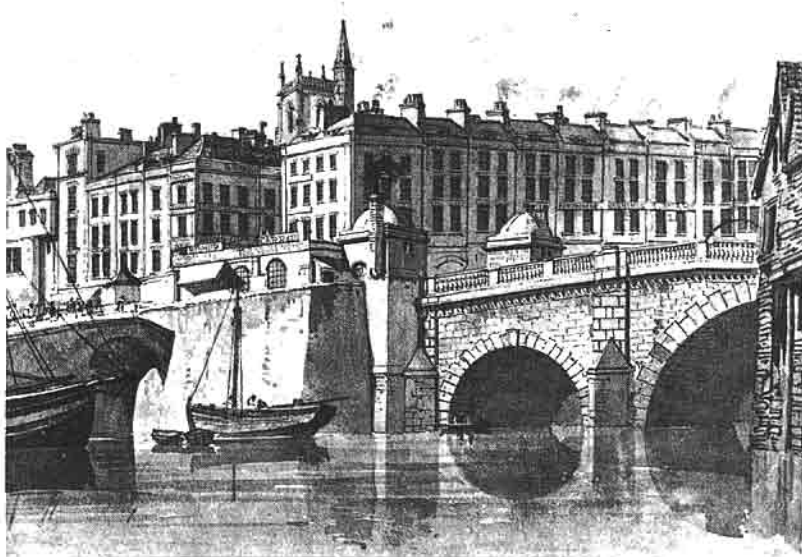


FIG. 3. Francis Garratt's 'Tea Warehouse' at Bristol Bridge. The bridge, opened in 1768, is depicted on the silver tokens of Niblock and Latham (*Courtesy Bristol Art Gallery*)

eventually brought in, but the public retained many examples. Today the Garratt-type Bristol shilling is easily the most common of the 1811-14 series, and several thousands must be in the hands of numismatists and museums. It seems likely, therefore, that the consortium did not suffer the loss anticipated in their January 1815 statement. Certainly Garratt himself was still in business several years later when the artist, Hugh O'Neill, depicted his tea warehouse at Bristol Bridge (see Fig. 3).

One final point: the Bath Court of Appeals handed down an important decision in the first week of January 1815, which affected the redemption of silver tokens not only in the Bath-Bristol area, but throughout the country. It had been assumed that many poor people, when the time came for them to turn in their silver tokens for

payment, would not have the full twenty shilling pieces required to obtain a pound note. The inference was that the issuer was under no obligation to pay for anything less than twenty shillings. Two Bath issuers, Culverhouse and Dore, so contended in court, but they lost the case and were instructed to pay for 'every single token'.²³ The Court explained the logic behind its decision: '... no one [after 20 December 1814] can ... add to the number of tokens in his possession, the Act prohibiting under penalty of £5 the passing [of] such tokens to any other person.'²⁴

²³ *Bath Journal*, 2 Jan. 1815.

²⁴ *Ibid.* Other works consulted throughout the preparation of this paper were: R. Dalton, *The Silver Token Coinage Mainly Issued between 1811 and 1812* (1922;

reprinted 1968); L. V. Grinsell, *A Brief Numismatic History of Bristol* (1962); *Sydenham Collection*, Bath Municipal Library.

MISCELLANEA

ANOTHER MODERN FORGERY OF A SCEAT

IN the *Journal* for 1968 Lynnette Hamblin and I published an eighteenth-century forgery of a sceat of BMC type 8.¹ A companion piece has now come to light, of BMC type 2c² (see Fig. 1). On the



FIG. 1

obverse, the runes, *aepa*, are excessively large, distinct, and complete. The reverse, which is reminiscent of the other forgery, is badly off-centre, and the letters that are on the flan are too regular, the *r* being unusual, and the *o* a mistaken annulet. The edge of the coin is also too regular. The weight, 1.32/20.3, is on the high side. The coin has a very

acceptable brown patina, reminiscent of many specimens of the primary series. X-ray analysis by 'isoprobe'³ reveals a total absence of silver, copper, and gold—the elements which normally make up c. 99 per cent of the Frisian runic sceattas—and instead an alloy consisting of lead, tin, and bismuth. There may be other specimens of this forgery, but I have not come across any.

D. M. METCALF

CORRECTION

CORRECTION to Rigold and Metcalf, 'A Check-list of English Finds of Sceattas', *BNJ* xlvii (1977), pp. 31–52. Plate 11. 22, is from Wicken Bonhunt, Essex (J. type 27, p. 56), not from Hoo, Kent.

A CUERDALE PARCEL REDISCOVERED

IN the summer of 1977, whilst following up references to Institutions which had applied for material from the Cuerdale hoard of 1840, the authors were fortunate to come across an unrecorded parcel of thirty-seven coins given in 1841 by the Duchy of Lancaster to the Royal Manchester Institution (the forerunner of the present City Art Gallery in Manchester).¹ Permission to publish the parcel has been kindly granted by the Gallery.

The coins, still wrapped in their original paper, were found amongst a miscellaneous reserve collection of coins and medals when one of the authors was asked to look through the Gallery's numis-

matic holdings. Accompanying the coins was a contemporary manuscript note which reads: 'Selection of specimens from the Coins discovered at Cuerdale in Lancashire presented by the Duchy of Lancaster Nov 1841.'

Subsequent research in the archives of the Institution has failed to uncover any further reference to the acquisition of the parcel, apart from a copy of the original letter of 1st September, 1841 requesting 'some of the ancient coins and medals found in Cuerdale in this County', addressed to Sir George Gray from Thomas Winstanley, the Institution's Honorary Secretary at the time.

¹ *BNJ* xxxvii (1968), 190–1.

² From the G. E. L. Carter collection, now in the Ashmolean Museum.

³ I am indebted to Professor E. T. Hall, Director of the Research Laboratory for Archaeology, for facilities there.

¹ This discovery is a by-product of research being carried out by Mrs. J. Lewis, an extra-mural student at the University of Liverpool, into silver ingots from the Cuerdale hoard. The Royal Manchester Institution was included in a copy list, provided by the Duchy of Lancaster, of institutions and individuals that had requested coins from the hoard. It is not known, however, how complete the original list is.

The coins were contained in four packages, corresponding to individual groups in the hoard. A full list of the pieces, with the weights given first in grains and then in grammes, is as follows:

The Vikings of Northumbria, c. 895–c. 903²

Group Iie C-1b/CR-G

Obv. small cross with pellets in two angles. Rev. CNVT REX, patriarchal cross

1.	21.6	1.40	↙	+CVN·NETI·	CNVT R E X·
2.	22.2	1.44	↙	+CVN·NET·TI·	CNVT R· E X·
3.	21.0	1.36	↗	+CVN·NET·TI·	CNVT R· E X·
4.	19.2	1.24	↘	+CVH·HET·TI·	CNVT R· E X·
5.	22.1	1.43	↗	+CVN·NET·TI·	CNVT R E X·
6.	21.6	1.40	↗	+CVN·NET·TI·	CNVT R· E· X·
7.	21.8	1.41	↗	+CVN·NET·TI·	CHVT R· E· X·
8.	23.0	1.49	↗	+CVH·HET·TI·	CHVT R· E· X·
9.	21.2	1.37	↘	+CVH·HET·TI·	CNVT R E X·
10.	19.2	1.24	↗	+CVN+NET+TI·	CNVT R E X·
11.	21.5	1.39	↙	+CVH·HT·T·E	CNVT R· E X·
12.	21.6	1.40	↗	+CVN·NEL·TI·	CNVT R· E· X·

St. Edmund Memorial Coinage late ninth and early tenth century.³

Group I with recognizable moneyers' names:

(a) with wedge-shaped central bar

13. 22.2 1.44 ↗ ADALBERTE (Adalbert) BMC 135

16. 21.3 1.38 ↗ ANSIGARIOR (Ansige) BMC 229

17. 20.4 1.32 ↗ ANSIERHOH (Ansier) BMC 254

21. 20.6 1.33 ↗ ISOLDICTME (?Jaod) BMC 442

22. 17.3 1.12 ↗ ODVLFSMEF (Odulf) BMC 472

24. 17.9 1.16 ↗ OTBERVMDTO (Otbert) BMC 493

26. 21.6 1.40 ↗ REARTVIOD (Reart) BMC 524

27. 20.6 1.33 ↗ RISLEFAMOIE (Rislica) BMC 535

28. 20.1 1.30 ↗ SIEMOHDNONET (Sigemund)

BMC 558/546

(b) with three pellets below

25. 19.0 1.23 ↗ QVRANMO . (Quaran) BMC 515

(c) with three pellets above

29. 21.0 1.36 ↘ VVINEGRAONT (Winccer)

BMC 613/614

(d) with numerous pellets above

30. 21.3 1.38 ↗ VVINIERMONETAI (Winier)

BMC 621

31. 19.3 1.25 ↗ VVINERMONE (Winier) BMC 639

(e) with one pellet at each side

14. 22.6 1.46 ↗ AOBRTNIME (?Adalbert)

BMC 159

² C. S. S. Lyon and B. H. I. H. Stewart, 'The Northumbrian Viking Coins in the Cuerdale Hoard', in *Anglo-Saxon Coins* (1961) and 'Classification of Northumbrian Viking Coins in the Cuerdale Hoard', *NC* 1964.

³ P. Grierson, *SCBI, Fitzwilliam Museum, Cambridge I*

(1958), J. D. A. Thompson, *SCBI, Ashmolean Museum,*

(f) with three pellets at each side

18. 18.9 1.22 ↗ DAIEMONDNO (Daegemund)

BMC 340

(g) with four pellets at each side

15. 17.8 1.15 ↘ ADRADVZVVOIE (Adradus)

BMC 181

Group II with uncertain names, probably denoting moneyers:

(a) with crescent above, one pellet at each side, one in centre, and one below

23. 17.9 1.16 ↘ OIHONIAIRI (Iria Mon retro-

grade) BMC 490

(h) with four pellets at each side

32. 21.2 1.37 ↘ IOFECΦNMOIA (Bosecin)

BMC 142/?

Group III with other legends:

'Danac' group

↗ with one pellet above, and at each side, two

pellets below

19. 21.5 1.39 ↘ ERALTMON (Ersalt) BMC 398

20. 19.2 1.24 ↘ ERALT-MON (Ersalt) BMC 402

Continental coins⁴

Charles the Bald, 843–77

Melle (Morrison, 1064)

Oxford I (1967), C. E. Blunt, 'The St. Edmund Memorial

Coinage', *Proceedings of the Suffolk Institute of Archae-*

ology, xxxi, part 3 (1969).

⁴ K. F. Morrison, *Carolingian Coinage: Numismatic*

Notes and Monographs No. 58, ANS 1967.

Obv. a cross. Rev. Karolus monogram

33. 25.3 1.64 ✓ + CARLVX REXF + METXVLLQ

34. 25.5 1.65 ↑ + CARLVX REXF + METXVLLQ

35. 25.2 1.63 ↑ + CARLVZ REXFR + MET + VLLQ

36. 25.0 1.62 ↗ + CARLVX REXFR + MET + VLLQ

Odo, 887-98

Limoges (Morrison, 1332)

Obv. +/ODO/+ in field. Rev. a cross

37. 26.7 1.73 ↘ + GRATIAD-IRE + LIMOVICAS CIVIS

The present parcel seems to constitute a fairly average small group as distributed by the Duchy of Lancaster, although it is perhaps surprising that no coin of Alfred was included. It is useful to compare its composition with that of four other groups:⁵

(1) Lübeck Library received a total of 23 coins:
12 St. Edmund Memorial; 5 Cnut/Cunnetti;
6 Continental.

(2) The Royal Numismatic Society received a total of 96 coins:

6 St. Edmund Memorial; 21 Cnut/Cunnetti;
8 Alfred; 15 Continental; 46 Sundries.⁶

(3) Saffron Walden Museum received a total of 15 coins:

8 St. Edmund Memorial; 3 Cunnetti; 4 Continental.

(4) The Society of Antiquaries of Newcastle received at least 19 coins:

8 St. Edmund Memorial; 10 Cunnetti; 5 Alfred.

The group of coins at Manchester does not appear to have been handled to any extent since the discovery in 1840 and therefore offers an opportunity of studying the characteristic light-brown patination of coins from the hoard.

Other small parcels have been located but it is likely that more remain: the authors would appreciate any information or details of such groups. Finally our acknowledgements are due to Mr. Wheeler of the Duchy of Lancaster, Mrs. Jen Lewis, and the Manchester City Art Gallery.

KEITH SUGDEN and MARGARET WARIHURST

WINCHESTER MONEYSERS

VOLUME xlvii of the *Journal* contains a review of *Winchester in the Early Middle Ages: An Edition and Discussion of the Winton Domesday* (Reviews, pp. 149-50). The review presents a very fair, if brief, picture of the book, which contains a remarkable array of information of interest to the numismatist and it is not the intention of this note to amend the opinions expressed by the reviewer. However, in the part of the book which deals specifically with the moneyers, there are a small error and an omission which, although minor, should nevertheless be noted as they are contained in a volume which will, without doubt, be quoted in the future whenever the coinage of mediaeval Winchester is being discussed.

(a) On page 415 (n. 3) there is a reference to a paper by R. H. M. Dolley which appeared in *Seaby's Bulletin* dated January 1969. The footnote suggests that an argument was put forward in this

paper to the effect that *Lyfing* was either one moneyer, with an interrupted career, or two moneyers of the same name. The paper by Dolley, in fact, criticizes the theory put forward in a note in *Seaby's Bulletin* in November 1968, where the 'one moneyer' suggestion is made, and suggests alternatively that the situation was probably that of a father followed by homonymous son.

(b) Page 416 notes two types recorded from Winchester for Stephen and lists the eight moneyers known. For the record, it should be mentioned that the type bearing the obverse inscription *PERERIC* is also recorded for Winchester, represented by a single specimen, moneyer *Geffrei*, in the collection of the writer of this note and formerly in the collections of B. Roth (Pt. 1, lot 145) and G. C. Drabble (Pt. 1, lot 723).

R. J. SEAMAN

⁵ These four institutions are also named on the list mentioned in note 1. The breakdown of types for the Royal Numismatic Society parcel was published in the *Numismatic Chronicle* for 1841. That of the other three

institutions has been extracted from their own internal records.

⁶ Sundries would include types such as *Mirabilia Fecit*, *Siefred*, etc.

THE 'ENIGMATIC MARK' OF RICHARD II

THE coin shown here is a York penny of Richard II, type III. It bears on the reverse a mark after TAS which has long been known but has often been misinterpreted either through poor striking, deterioration of the dies, or through wear or clipping of the coins.



Walters, writing in 1904¹ described it as an escallop and said that though the mark was often indistinct and blurred he had a specimen which was perfectly struck. Unfortunately, though, he did not illustrate it.

In 1962 Mr. Frank Purvey, in his Paper on the smaller coins of the reign,² differed from Walters over the designation of scallop. Although he could find only one coin on which the mark was relatively clear³ he considered it more like a trefoil. He went on to say that on some coins 'this trefoil-like form disintegrates and resembles a flaming sun', and if it was intended to be a sun he offered the suggestion that its presence on the coin might possibly be explained by the fact that late in the reign

Richard adopted this device as his personal emblem.

In 1969 Miss Archibald, in her Paper on the Attenborough Hoard,⁴ referred to six coins with 'the enigmatic mark' after TAS. She expressed a preference for Walters's earlier suggestion that it was a scallop shell rather than the trefoil or sun suggested by Mr. Purvey. The Attenborough hoard coins were not distinct, however, and she considered that until a really well-preserved penny showing the mark turned up its interpretation must remain uncertain.

Although the penny illustrated here is not well struck, the mark is very clear and undoubtedly a scallop; therefore it is published to place it on record. Whether this was the coin which belonged to Walters cannot be determined. His 1913 Sale Catalogue⁵ lists two specimens described 'both very well preserved and rare', and the writer has another one with the mark almost equally clear.

As to the reason for this unusual mark, one can only speculate. Although it is found on certain of Richard's gold coins, Walters could find nothing to account for its presence on a York penny and came to the conclusion it could only be the mark of some die engraver or mint official. Mr. Purvey considers that its purpose may never be known but that it is 'just one of the many things which make the medieval series so interesting'. Miss Archibald regards the mark as one 'peculiar to York and analogous to the Archbishops' personal marks which appear on the pence of this mint at later periods'. This definition is probably as near to the truth as we are likely to get.

M. DELMÉ-RADCLIFFE

A YORK PENNY OF RICHARD II

SOME years after writing my article on the pence, halfpence, and farthings of Richard II which appeared in the *BNJ* xxxi (1962), I was re-examining the late style penny from the Clarke-Thornhill bequest in the British Museum. This coin is illustrated on Pl. VIII, 79 in the above mentioned article. From careful examination of the quatrefoil on the reverse there seemed, albeit rather shadowy, the outline of an R in the centre.

At the time I did draw the attention of Miss Marion Archibald of the Department of Coins

and Medals to this rather extraordinary phenomenon and she agreed with me that there was little doubt that there was an R in the centre of the reverse. Indeed so certain was I that several editions ago I added the description 'R in centre of quatrefoil' to the Class 4 York pennies listed in the 'Standard Catalogue'. Needless to say nobody has ever queried this statement or asked where the information came from. However, Mrs. Delmé-Radcliffe has written a small note on another aspect of the coins of Richard II and I thought it

¹ *NC* Series IV, vol. iv.

² *BNJ* xxxi, 1962.

³ Ashmolean Museum.

⁴ *BNJ* xxxviii, 1969.

⁵ Sotheby, 20 May 1913, lot 211.



FIG. 1

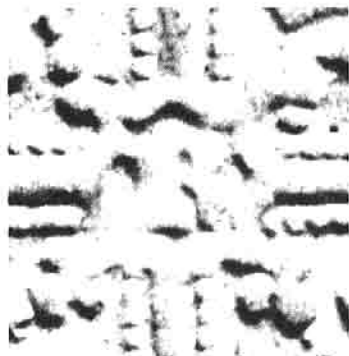


FIG. 2

only right and proper that I draw the Members' attention officially to this coin.

It is quite possible that all the Class 4 coins which are listed (Pl. VIII, 77-80) do have an R in the centre but only no. 79 is in any way distinct and indeed is visible from the illustration in the *Journal* through a low-power magnifying glass.

The illustration reproduced here is enlarged ten times from the original and is, if anything, somewhat clearer than a magnifying glass examination of the coin (Fig. 1).

The only coin that has an R punch the right size to go into the quatrefoil (assuming that an existing

punch was used, and not a new one), is the half noble. There is in the British Museum a cast (the coin is in the Bibliothèque Nationale in Paris) which has an R on the reverse which appears to be almost identical to the R on the York pennies (Fig. 2). This cast has also been enlarged to the same scale as the penny.

This is the only instance that I can recall of the King's initial, for this is what it must surely be, appearing on the reverse of an English silver hammered coin.

I shall be pleased to hear from any Members who may be able to shed any further light on this.

FRANK PURVEY

ADDITIONS TO THE ANGLO-GALLIC GOLD SERIES

SINCE publication of my paper on the Salutes of Henry VI in the 1973 volume of the *Journal*, the following coins have been reported to me.

1. From the National Museum of Antiquities of Scotland, Edinburgh.

A specimen of Henry VI salute Paris mint 3rd issue.

Obv. as 2nd Issue, with AVE written downwards.

Rev. with pellet under T of REGNAT.

Listed by me as 'no specimen known'.

2. From the Koninklijk Penningkabinet s'Gravenhage, Holland.

A specimen of Henry VI salute Paris mint.

Obv. 2nd issue, usual style.

Rev. 1st issue with R gothic instead of the M Roman of the regular 2nd Issue.

This is a die-link of the 1st and 2nd issues, previously unknown.

3. A new mint for the gold Hardi of the Black Prince. A specimen of this coin from the mint of Poitiers has come into my hands.

This mint has not previously been recorded for the gold Hardi, though Poy d'Avant mentions a silver pattern, which he did not actually see, and of which there is now no trace.

Obv. ED PO GNS REGIS ANGLI AQUITA

Plain fillet on Prince's head.

Rev. AUXLLUM MEUM A DOMINO P

In first angle; lis.

(Note two L's and no I in AUXLLIUM.)

R. D. BERESFORD-JONES

THE SCOTTISH COPPER COINAGES, 1642-1697

A POSTSCRIPT

IN the *BNJ* xli (1972), 109-10, we put forward arguments showing why we considered that CR and CRⁱⁱ turners were struck during the reigns of Charles I and Charles II respectively. At the time the paper was written no documentary evidence had been found which supported these conclusions. Since then an important document has come to light among the Lauderdale muniments which bears on this problem.¹ This is a petition by Sir John Falconer, master of the Scottish mint, addressed to the Lord Commissioner (i.e. Lord Middleton, the king's commissioner to the Scottish Parliament) and to the lords of the Privy Council; although undated, it was probably written during the first half of 1663.

The petition draws attention to the care taken and expenses incurred by Falconer in repairing the mint buildings and equipment. It ends with a request for a warrant to strike 1,500 stones of copper in turners, having the same 'impression and circumscription' as the previous issue, but with the addition of 'two ii for secundus'. This phrase not only confirms our suggestion about the sequence of the two types of turners, but shows that the numeral is to be read with the initials of *C(arolus) R(ex)* to indicate the reign. In July 1650 the mint-master had received a warrant for a small issue (60 stones) of turners, and strictly speaking this was an issue of Charles II, whose Scottish reign dated from his father's execution in 1649 and not from his English restoration in 1660; but in effect this issue was merely a prorogation of the much larger copper coinage (4,000 stones) of 1642-8, and the coins belonging to it cannot today be distinguished from those struck previously.

Since 1650 the Scottish mint in the Cowgate, Edinburgh, had been out of use and both buildings and equipment had been allowed to fall into a state of disrepair. Indeed some of the 'toolles and work loomes' had vanished and on 1 January 1661 an act of the Scottish Parliament authorized the General of the mint to try to find them.²

On 12 June 1661 an act of the Scottish Parliament had authorized the striking of 3,000 stones of copper turners, of which 2,000 stones was to be coined within three years and the remaining 1,000 stones at some later date.³ But according to an act of 24 April 1662 the minthouse was not yet ready,⁴

and delay in completing repairs and replacing equipment is probably the reason why the striking of turners did not begin until the end of July 1663. By the time Falconer submitted his petition he was able to report his readiness to start work on the turners, except for the lack of a warrant to commence striking and instructions about their design.

Although parliament had authorised 3,000 stones of turners, of which the first 2,000 was to be completed by June 1664, in his petition Falconer asked for a warrant to coin only 1,500 stones. A possible explanation for this may be that time was running short and Falconer reckoned he could not produce more than 1,500 stones within the period specified. In the event, however, the period was later prolonged.

The petition is reproduced below, all the abbreviations having been expanded.

'To his Grace the Lord Commisioner and the lordis of his Majesties privie Council

The humble petition of Sir John Falconer, Master of his Majesties mint Shewith

That flor so much as your petitioner after much care paines and extraordinarie expense that he hes bestowed in repairing the workhouses and toolles and putting both in a posture for work (about which he hes bein necessitat not onlie to mainteine all sortis of workmen necessary for the same and upon his awin charge and credit hes furnished all materiallis necessary for the work But also he hes provydit Cooper to be coyned in turnoires so that ther is nothing wanting for the goeing therof and coyneing of the said cooper But your Lordships warrand for doing the quantitie therof and the impression and circumscriptions that sall be upon the same

May it therfoir pleas your Grace and Lordships grant to your petitioner a warrand to coyne fyfteine hundreth stane weight of Cooper in Turnoires and ordeine the impression and circumscription that was upon the last cooper journey to be continued upon the present journey of tournoires with this addition of two ii for secundus: And your petitioner sall ever pray.'

J. K. R. MURRAY and I. H. STEWART

¹ Scottish Record Office ref. 69/6/12. We are most grateful to Captain G. E. I. Maitland-Carew for permission to discuss and reproduce Sir John Falconer's petition.

² R. W. Cochran-Patrick, *Records of the Coinage of Scotland*, ii, 138, item XIV.

³ See *BNJ* xli, 107.

⁴ R. W. Cochran-Patrick, *Records*, ii, 146, item XXVI.

TWO SEVENTEENTH-CENTURY HOARDS AND THEIR
EVIDENCE OF COIN WEAR

THE two hoards published here were examined in the British Museum after being declared Treasure Trove. After examination the Burghclere hoard was acquired intact by the Hampshire County Museum Service and the Winsford hoard also remained intact and was acquired by Grosvenor Museum, Chester. A summary report of the latter hoard is contained in *Coin Hoards III* (1977) no. 345.

The Winsford (Cheshire) hoard was found during construction work at Winsford in Cheshire in 1970. The hoard was found in a pot now in the Grosvenor Museum, Chester. It was deposited after A.D. 1643 and contained 243 silver coins and three base silver forgeries (face value £9. 5s. 5½d.).

ENGLAND

EDWARD VI. LONDON

shilling (1)
tun (1552-3), 1 5.28 g.

MARY I. LONDON

groat (22)
pomegranate (1553-4), 22 1.28*

PHILIP AND MARY. LONDON

sixpence (1)
lis (1557), 1 2.24

groat (4)
lis (1554-8), 4 1.17*

ELIZABETH I. LONDON

shilling (19)
lis (1558-60), 2 5.25*
martlet (1560-1), 5 5.28*
cross crosslet (1560-1), 4 4.65*
bell (1582-3), 1 5.79
A (1583-5), 2 6.05*
escallop (1584-7), 2 4.78*
tun (1591-6), 1 4.00
key (1595-8), 2 5.89*

sixpence (57)
pheon (1561), 3 2.70*
pheon (1561), 1 2.75
pheon (1564), 2 2.21*
rose (1565), 1 2.64
portcullis (1566), 4 2.53*
lion (1567), 4 2.55*
coronet (1567), 4 2.43*
coronet (1568), 2 2.37*
coronet (1569), 4 2.54*
coronet (1570), 1 2.35
castle (1570), 1 2.60
castle (1571), 1 2.24
ermine (1571), 1 2.40
ermine (1573), 1 2.77
acorn (1573), 1 2.59
eglantine (1574), 3 2.59*
eglantine (1575), 1 2.22
eglantine (1576), 1 2.70
cross (1578), 2 2.72*

cross, long (1580), 3 2.82*
cross, long (1581), 1 2.94
bell (1583), 1 2.14
A (1583), 1 2.85
escallop (1584), 2 2.87*
escallop (1585), 2 2.49*
crescent (1587), 2 2.13*
crescent (1589), 1 2.82
hand (1590), 1 2.87
hand (1591), 1 2.49
tun (1592), 3 2.79*
woolpack (1594), 1 2.90
groat (5)
cross crosslet (1560-1), 3 }
martlet (1560-1), 1 } 1.33*
illegible (1560-1), 1 }
threepence (10)
crown (1568), 1 0.87
eglantine (1575), 5 1.03*
cross (1578), 2 1.01*
cross, long (1580-1), 1 1.01
illegible (uncertain), 1 0.67

JAMES I. LONDON

shilling (20)
thistle, 1st bust (1603-4), 2 5.64*
thistle, 2nd bust (1603-4), 2 5.76*
lis, 2nd bust (1604-5), 3 5.43*
lis, 3rd bust (1684-5), 4 5.56*
rose, 4th bust (1605-6), 2 5.37*
escallop, 4th bust (1606-7), 2 5.08*
grapes, 4th bust (1606-7), 3 5.58*
coronet, 4th bust (1607-9), 1 5.58
mullet, 5th bust (1611-12), 1 4.58
sixpence (14)
thistle, 1st bust (1603), 1 2.90
thistle, 2nd bust (1603), 1 2.69
lis, 2nd bust (1604-5), 1 2.74
lis, 3rd bust (1604-5), 2 2.92*
rose, 3rd bust (1605-6), 1 2.55
rose, 4th bust (1605-6), 5 2.66
thistle, 6th bust (1622), 1 3.03
lis, 6th bust (1624), 1 2.36
trefoil, 6th bust (1624), 1 2.60

CHARLES I. LONDON

half crown (7)
tun, 3rd horse (1636-8), 3 15.08*
triangle, 3rd horse (1639-40), 1 14.89
triangle in circle, (1641-3), 3 13.67*
4th horse
shilling (56)
lis, bust A (1625), 1 4.50
cross calvary, bust B (1625-6), 1 5.90
plume, bust C (1630-1), 3 5.39*
portcullis, bust D (1633-4), 1 5.95
(contemporary imitation)
bell, bust D (1634-5), 1 4.34
crown, bust D (1635-6), 4 5.17*
crown, bust D (1635-6), 1 4.34
(contemporary imitation)
tun, bust D (1636-8), 9 5.97*

tun. bust D	(1636-8), 1	4.05 (contemporary imitation)
anchor. bust E	(1638-9)	5.87*
triangle. bust E	(1639-40), 1	5.98
triangle. bust F	(1639-40), 5	6.12*
triangle. bust F	(1639-40), 1	5.84 (triangle over anchor)
star. bust F	(1640-1), 4	5.89*
triangle in circle, bust F	(1641-3), 10	5.83*
P in brackets, bust F	(1643-4), 7	6.05*
illegible, bust D	(uncertain), 1	6.07
illegible, bust F	(uncertain), 3	6.08*
sixpence (17)		
plume, bust C	(1630-1), 1	2.46
harp, bust D	(1632-3), 1	2.97
portcullis, bust D	(1633-4), 1	3.02
crown, bust D	(1635-6), 4	2.85*
tun. bust D	(1636-8), 2	} 2.85*
tun. bust E	(1636-8), 1	
anchor, bust E	(1639), 2	2.82*
triangle, bust E	(1639-40), 1	3.06
triangle, bust F	(1639-40), 3	2.96*
star, bust F	(1640-1), 1	3.04
OXFORD		
half crown (2)		
Shrewsbury horse	(1642), 1	14.42
Oxford horse	(1643), 1	14.84
ABERYSTWYTH		
shilling (1)		
book	(1638-42), 1	5.90
SCOTLAND		
JAMES VI, EDINBURGH		
thistle merk (English 1s, 1½d.) (1)	(1601-4), 1	6.27
IRELAND		
JAMES I, LONDON		
shilling (English 9d.) (6)		
rose, large, 3rd bust	(1604-7), 1	4.03
rose, small, 3rd bust	(1604-7), 1	4.38
rose, large, 4th bust	(1604-7), 1	3.84
rose, small, 4th bust	(1604-7), 1	3.59
escallop, 3rd bust	(1604-7), 1	3.75
martlet, 3rd bust	(1604-7), 1	2.04 (broken)

N.B. Weights are expressed in grammes, average weights are marked with an asterisk. The varieties cited are those outlined in J. J. North's *English Hammered Coinage*.

Although this hoard is a typical example of an emergency deposit of the Civil War period containing low denomination coins, it seems worthwhile, however, to publish it in full, because previous hoards of this type have not been published with records of the weights of the coins they contain.

An analysis of the weights of the coins in this hoard has shown that they provide a concrete example of the fact that the lower a coin's denomi-

nation the more it is likely to be worn with use. They also illustrate the loss of weight to a coin relative to the length of time it has been in use. The following table shows the average percentage weight losses which are observable in this hoard (percentages taken from groups of less than five coins are in brackets).

	3d	4d	6d	9d (Irish shilling)	1/- (16 ⁰ / ₁₆) (Scotts merk)	2/6
Edward VI					(16 ⁰ / ₁₆)	
Mary I		39 ⁰ / ₁₀₀				
Philip and Mary		(44 ⁰ / ₁₀₀)	(28 ⁰ / ₁₀₀)			
Elizabeth I	38 ⁰ / ₁₀₀	36 ⁰ / ₁₀₀	18 ⁰ / ₁₀₀		17 ⁰ / ₁₀₀	
James I			10 ⁰ / ₁₀₀	15 ⁰ / ₁₀₀	11 ⁰ / ₁₀₀	(8 ⁰ / ₁₀₀)
Charles I			5 ⁰ / ₁₀₀		5 ⁰ / ₁₀₀	4 ⁰ / ₁₀₀

Although a few coins in this hoard are clipped this is not sufficient to distort the over-all picture of wear shown by the weights of the coins. The greater wear of lower denomination coins is dramatically demonstrated and the rate of wear is shown to be also relative to the length of time in use.

The inclusion in the hoard of three contemporary forgeries and several non-English coins along with so many very worn coins suggests strongly that the hoard was not carefully accumulated over a period but drawn straight from circulation. The military activities in Cheshire during the period 1643-6 suggest a likely context for its concealment.

The Burghclere (Hampshire) hoard was found during restoration work on a cottage in Burghclere, Hampshire in 1971. The hoard was found in a pot and on top of the coins was pushed a screwed up piece of paper to act as a bung. (This piece of paper was torn from a notebook belonging to a certain Benjamin Avery. On it were written his name and an account of methods for making monetary calculations; the paper was too damaged to be certain what these calculations were for. The handwriting used was typical of the reign of Charles I. Extensive researches discovered only one person of the name alive at this time. He was a resident of Frome in Somerset and a trustee of the Frome charities. He died in 1676 aged at least seventy. It was not possible to find any links between him or his family and the part of Hampshire where the hoard was found. It is, however, possible that the page was torn from this Benjamin Avery's notebook.) The hoard was deposited after A.D. 1660 and contained 167 silver coins (face value £8. 10s. 3d.). The small number of clipped coins in the hoard is worthy of note; only about ten coins seem to have suffered from it to any obvious extent.

ENGLAND			P in brackets, 3rd horse	(1643-4), 2	14-81, 12-94 (13-87*)
EDWARD VI, LONDON			R in brackets, 3rd horse	(1644-5), 1	14-63
<i>shilling</i> (1)			Sun. 4th horse	(1645-6), 1	14-70
tun	(1551-5), 3	5-94	Sun. 5th horse	(1645-6), 1	14-45
ELIZABETH I, LONDON			<i>shilling</i> (51)	(1634-5), 1	5-87
<i>shilling</i> (22)			bell, bust D	(1635-6), 5	5-94, 5-85, 5-80, 5-75, 5-74 (5-81*)
cross crosslet	(1560-1), 4	5-63, 5-58, 5-57, 5-45, (5-55*)	crown, bust D	(1635-6), 1	5-91 (with plumes)
martlet	(1560-1), 4	5-92, 5-84, 5-74, 5-50 (5-77*)	tun, bust D	(1636-8), 4	5-94, 5-85, 5-81, 4-72 (5-58*)
A	(1583-5), 2	5-79, 5-11 (5-45*)	tun, bust E	(1636-8), 1	5-88
crescent	(1587-90), 1	5-17	anchor, bust E	(1638-9), 1	5-83
hand	(1589-92), 3	5-90, 5-70, 5-11 (5-57*)	triangle, bust E	(1639-40), 2	5-75, 4-09 (4-92*)
woolpack	(1594-6), 4	5-97, 5-93, 5-04, 4-36 (5-32*)	triangle, bust F	(1639-40), 3	5-91, 5-81, 5-74 (5-82*)
key	(1595-8), 2	5-65, 4-91 (5-28*)	star, bust F	(1641-3), 5	5-98, 5-92, 5-82, 5-80, 5-87 (5-85*)
2	(1602-3), 1	5-65	triangle in circle, bust F	(1641-3), 13	6-04, 6-01, 5-86, 5-83, 5-79, 5-72, 5-65, 5-59, 5-58, 5-55, 5-51, 5-25, 5-21 (5-66*)
illegible	(uncertain), 1	3-11	P in brackets, bust F	(1643-4), 5	5-91, 5-73, 5-67, 5-60, 4-94 (5-57*)
<i>sixpence</i> (30)			eye, bust F	(1645), 2	5-91, 5-44 (5-67*)
pheon	(1561), 3	2-61, 2-39, 2-31 (2-43*)	illegible, bust F	(uncertain), 4	6-04, 5-84, 5-82, 5-29
pheon	(1562), 1	2-07 (2 over 1)	sun, bust G	(1645-6), 4	5-84, 5-76, 5-65, 5-45 (5-67*)
pheon	(1564), 1	2-58 (4 over 3)	<i>sixpence</i> (3)		
rose	(1565-6), 1	2-14	triangle, bust E	(1639-40), 1	2-91
crown	(1569), 2	2-56, 2-28 (2-42*)	illegible, bust F	(uncertain), 1	2-20
crown	(1570), 1	2-62	R in brackets, bust G	(1644-5), 1	2-89
castle	(1570), 2	2-70, 2-65 (2-67*)	OXFORD		
castle	(1571), 1	2-54	<i>half crown</i> (1)		
acorn	(1573), 1	2-38	plumes, Shrewsbury horse	(1642), 1	14-33
egplantine	(1574), 1	2-41	<i>half crown</i> (1)		
egplantine	(1575), 2	2-62, 2-61 (2-61*)	crown	(1660-2), 1	14-90
short cross	(1578), 1	2-64	CHARLES II, LONDON		
long cross	(1580), 1	2-33	SCOTLAND		
long cross	(1581), 1	2-80	JAMES VI, EDINBURGH		
sword	(1582), 2	2-78, 2-67 (2-72*)	thistle merk (12)	(1601), 2	6-22, 5-79 (6-00*)
bell	(1583), 1	2-62		(1602), 7	6-18, 5-99, 5-97, 5-94, 5-92, 5-87, 5-49 (5-90*)
escallop	(1584), 2	2-80, 2-58 (2-69*)		(1603), 1	6-14
escallop	(1585), 1	2-51		(illegible), 2	5-55, 4-94
tun	(1592), 2	2-78, 2-69 (2-73*)	CHARLES I, EDINBURGH		
tun	(1593), 1	2-64	<i>six shilling</i> (1)	(1637-42), 1	2-85
1	(1601), 1	2-64	IRELAND		
2	(1602), 1	2-41	JAMES I, LONDON		
JAMES I, LONDON			<i>shilling</i> (11)		
<i>shilling</i> (23)			bell, 2nd bust	(1603), 2	4-33, 3-47 (3-90*)
thistle, 2nd bust	(1604), 2	5-71, 4-88 (5-29*)	martlet, 2nd bust	(1603), 1	3-75
illegible, 2nd bust	(1604), 1	5-83	martlet, 3rd bust	(1605), 1	3-85
lis, 2nd bust	(1604), 1	5-19	rose, small, 3rd bust	(1604-7), 2	4-05, 2-83 (3-44*)
lis, 3rd bust	(1605), 2	5-83, 5-65 (5-74*)	rose, large, 3rd bust	(1604-7), 2	4-41, 3-27 (3-84*)
rose, 3rd bust	(1605-6), 1	5-01	rose, large, 4th bust	(1604-7), 2	3-93, 3-57 (3-75*)
rose, 4th bust	(1605-6), 2	5-80, 5-74 (5-77*)	rose, small, illegible	(1604-7), 1	3-53
escallop, 4th bust	(1606-7), 4	5-84, 5-78, 5-65, 5-25 (5-62*)			
grapes, 4th bust	(1607), 1	5-65			
coronet, 5th bust	(1607-9), 4	5-71, 5-54, 5-34, 5-07 (5-41*)			
trefoil, 5th bust	(1613), 1	5-04			
thistle, 6th bust	(1621-3), 1	4-81			
lis, 6th bust	(1623-74), 3	5-98, 5-80, 5-54 (5-77*)			
<i>viyence</i> (4)					
thistle, 1st bust	(1603), 1	2-68			
rose, 3rd bust	(1605), 2	2-60, 2-35 (2-47*)			
rose, 4th bust	(1605), 1	2-68			
CHARLES I, LONDON					
<i>half crown</i> (7)					
star, 4th horse	(1640-1), 1	14-69 (rev. star over triangle)			
triangle in circle, 4th horse	(1641-3), 1	15-00			

Although it is possible to determine the date of the latest coin in this hoard (a Charles II half-crown struck at the Tower mint during the period

1660-2), this does not give a precise indication of its date of deposit. The reason for this is that coins issued up to 1662 continued to be the mainstay of circulating currency for the next thirty-five years until the recoinage in 1697.¹

Hoard known from their contents to have been deposited during this thirty-six year period from 1662 to 1697 attest to the minimal role played by the coins struck after 1662 in the currency at that time. For example, 138 coins deposited at Staple² (Canterbury) after 1673 contained only 2.1 per cent machine struck coins, 1,884 coins deposited at Crediton³ after 1683 contained 1.4 per cent, 326 coins deposited at Broadwoodwidge⁴ in 1685 contained 2.1 per cent, 5,267 coins deposited at Welshback⁵ in 1688 contained 3.5 per cent and 1,197 coins deposited at Yearby⁶ in 1697 contained 14.5 per cent. In view of the relative scarcity of machine struck coins even in hoards deposited late in this period it would be unwise to maintain that the absence of such coins from this hoard indicates its deposit before the initiation of the machine striking of coins in 1662.

A full account of the weights of the coins in this hoard has been published here because no hoards of similar composition have yet been published with the weights of the coins they contain recorded. Like the Winsford hoard, the weights of the coins in this hoard show an increase in the loss of weight from use in relation to both denominations and time in circulation. Most of the types common to this hoard and that from Winsford show a deterioration in weight relative to the twenty or more years separating their date of deposit. The only exception to this decrease are the Elizabeth I shillings in the Burghclere hoard which show an average increase in weight of 4.5 per cent over those in the Winsford hoard. This is probably an indication of the less hectic circumstances of the deposit of the Burghclere hoard.

A comparison of the weight loss observed in the coins of the Burghclere hoard can also be made with that of the Broadwoodwidge hoard (the only datable hoard of the period 1662-97 which has been published with a record of the weights of the coins it contained). This hoard which must have been deposited after 1685 shows increased weight losses in the coins it has in common with the Burghclere hoard. The average percentage losses for each coin type in these two hoards is shown in the

following tables (average taken from groups of less than five coins are in brackets).

Burghclere hoard

	6d.	9d. (Irish shilling)	1/-	1/1½ (Scots merk)	2/6
Elizabeth I	18.4%		12.5%		
James I	(17%)	18.5%	12.2%	14%	
Charles I	6%		5.6%		3.9%
Charles II (hammered)					(1%)

Broadwoodwidge hoard

	6d.	9d.	1/-	1/1½	2/6
Elizabeth I	20.6%		13.7%		
James I	19.3%		12.2%		
Charles I	9.3%		8%		6.4%
Charles II (hammered)			(2.7%)		(10.3%)

The necessarily different circumstances of the accumulation and deposit of these two hoards may account for some of the greater weight loss observed in the Broadwoodwidge hoard in comparison with the Burghclere hoard, but the uniformity of this decrease throughout the hoard suggests that the disparity of weight loss between it and the Broadwoodwidge hoard could be a direct result of the earlier deposit of the Burghclere hoard. It seems likely therefore that this hoard was deposited earlier than 1685. How much earlier cannot be determined on the basis of the evidence at present. Until more seventeenth-century hoards are published with fuller details of the weights of the coins they contain the application of the evidence of coin wear found in this and the Winsford hoard must remain limited.

The inclusion of Irish and Scots coins with non-English denominations in English seventeenth-century hoards is not unusual. Even as late as the year of the recoinage in 1697 the depositor of the Yearby hoard included in it three Irish shillings. The Irish coins in the two hoards presently under consideration are shillings which were made to a lower standard than that of England. They were allowed to circulate in England at a nominal value of 9d. The Scots coins in these hoards were issued before James VI's accession to the English throne. They are silver 'thistle' merks valued at 13s. 4d. (Scots). It is likely that they were initially circulated in England at their official exchange value of 1s. 1½d. By the time of these hoards most of the coins of these types were well worn by use and had

¹ J. Craig, *The Mint* (Cambridge, 1953), p. 167.

² Staple, Canterbury Hoard, J. Allen, *NC* (1943), p. 103.

³ Crediton Hoard, H. A. Grueber, *NC* (1897), p. 159.

⁴ Broadwoodwidge Hoard, S. A. Castle, *BNJ* (1973), p. 146.

⁵ Welshback Hoard, L. W. G. Malcolm, *NC* (1925), p. 236.

⁶ Yearby Hoard, J. P. C. Kent, *BNJ* (1954), p. 294.

probably lost their original identity in the minds of their users. The Irish shillings were probably used as English sixpences being about the same size and having approximately similar types. The Scots 'thistle' merks were probably used as English shillings being the same size and almost the same weight.

Irish shillings of James I from these two hoards are of added interest as they augment the range of bust and privy mark combinations known at present. The following table shows the range of these varieties.

	1st Coinage		2nd Coinage	
	Bust 1	Bust 2	Bust 3	Bust 4
Bell	B, BM, AS, S			
Martlet		B, BM, AS, S	B, W, BM, AS, S	
Rose (large)			B, W, BM, AS, S	B, W
Rose (small)			B, W, BM, (AS)	W, (AS)
Scallop			W, AS, S	BM, AS, S

The large and small varieties of the rose privy mark result from the use by the die cutters of two different punches when engraving it. The larger punch was borrowed from those made for the English shilling dies; the smaller was borrowed from those for the English sixpence dies. It was the smaller of these rose marks which Aquilla Smith must have mistaken for the cinquefoil mark (which he dated to 1613-15).

J. CRIBB

(B = varieties in the Burghclere hoard, W = in the Winsford hoard, BM = in the British Museum, AS = varieties published by Aquilla Smith in 'Notes on the Irish Coins of James I', *NC* (1879), pp. 185-90, and S = varieties listed by P. Seaby in *Coins and Tokens of Ireland* (London, 1970), pp. 59-60.)

JOHN WILKINSON HALFPENNY: A TWENTIETH-CENTURY FABRICATION?

In *Provincial Token-Coinage of the 18th Century* Dalton and Hamer listed nine variants of Wilkinson's halfpennies with the Vulcan reverse dated 1790.¹

A few years ago Mr. John R. Farnell sen.² gave me a twentieth-century fabrication (Fig. 1); and also supplied the information recorded on page 243 of *Specious Tokens and those struck for*

General circulation 1784-1804.³ To repeat from that work: 'In 1947 a very small number of uniface replicas of the reverse of Wilkinson's third type of halfpenny . . . were struck to the order of Mr. Edward West, the Eastern Representative for ORCo. The original pieces and the copy are masonic items . . . Only some dozen pieces were struck . . . The Osborne Register Company of



FIG. 1

¹ R. Dalton and S. H. Hamer, *The Provincial Token-Coinage of the 18th Century. Part X*, p. 306, War. 424-31a.

² J. R. Farnell, Personal communication, 1973.

The writer would like to pay tribute to the late John R. Farnell, who died 13 September 1977 after a long illness. He gave unstinting assistance to me in frequent

letters over many years, and I am grateful for his hospitality in 1959 on an unforgettable visit to see his collection.

Numismatics has suffered the loss of a fine research worker, who also stimulated thought in others.

³ R. C. Bell, *Specious Tokens and those struck for General Circulation 1784-1804*, p. 243, Corbitt & Hunter, 1968.



FIG. 2

Cincinnati, Ohio, (ORCo) is now the Osborne Coinage Company.'

Recently, a collector who wishes to remain anonymous, purchased a Wilkinson token in America shown in Fig. 2. The reverse is from the same die as Fig. 1; but the obverse is unrecorded, and is different from all the eighteenth-century pieces illustrated in Dalton and Hamer's work. The tie of the queue points to the i of IOHN, lower

than the eighteenth-century pieces; in varieties War. 424-5 the tie points to the o, and in varieties War. 426-9 it points between the o and the h. Variety War. 430 has a period after the r of IRON-MASTER.

It would seem that this newly reported piece is another twentieth-century fabrication, probably emanating from the same source as that described in Specious Tokens.

R. C. BELL

REVIEWS

Anglo-Saxon England. Edited by PETER CLEMONS and a board of twelve. Cambridge University Press, 1972-7. Volumes i-vi. Pp. 320+, except volumes iii and iv (260+), a few figures, and 8 plates in volumes i, ii, iv, vi. £6.50 (i) rising to £12.50 (vi).

THE intellectual attraction of Old English studies lies partly in the restriction and variety of the evidence, which demand that every student should be acquainted with, if not master of, all the avenues, documentary, archaeological, stylistic, linguistic. He needs them all because he works by oblique insights and contingent probabilities. The solvent of a problem outside his speciality may lie in his hands. Accustomed to severe criticism of his own sources he will tend to be critical of those of others. Here he can still breathe the air of the 'universal man'—breathe it in poverty, like Hearne, and flourish. The lack of implicit categories impedes specialization: no one can 'answer political questions in purely political terms', when, at least before the tenth century, he cannot isolate them. At times the philologist, like an animated air-pump, has tried to gobble all the air, under a species of primacy, since it was largely language that held 'Anglo-Saxon England' together, but from the beginning, in the days of Camden and Cotton, the achievements of others, including numismatists, have kept language in its place and reminded him that Old English culture was receptive and not obstinately insular, and that it is dangerous to hypothesize any uniform 'Englishness' except in speech.

Anglo-Saxon England is a hard-backed annual accommodating all these insights, and many, like the reviewer, will find little of it alien and much of it distinguished by a comparable elegance, transparency, and breadth of reference. It clearly intends to be more than a 'miscellany' and generally, though not invariably, accepts the criteria for inclusion in something more than a local or specialized journal—wide relevance in geography or matter, or the opportunity to illustrate the methods or the present state of more self-bounded studies in wide purview. The numismatic articles generally satisfy one or more of these conditions, as do several others that have some bearing on coinage.

That five out of the six volumes under review contain specifically numismatic contributions

testifies to the recognized place of coinage in the Old English field as a source for place-names, personal names, various metallurgical matters and, at least in the eighth century, for insular art, to say nothing of economics and, indeed, the bare structure of institutional history. This has been so ever since the time of Camden and Cotton. There may still be a few 'wise monkeys' covering their eyes and ears in the darker woods; but there is no excuse for such wilful ignorance, nor for shyness, deference, and esoteric incommunication on the part of numismatists. Numismatists have no mystique not shared by other practitioners. Yet there are still traces of this unnecessary, and damaging, modesty in the longest and widest-ranging of these contributions, Mr. Lyon's 'Some problems in interpreting Anglo-Saxon coinage', in vol. 5. That our former President, unquestionably the boldest and most stimulating student of weights and standards, should admit to little knowledge of economic history, when in the Old-English field he holds almost all the cards! Imagine a pre-literary philologist addressing himself thus from his quaggy crust when he seeks to knock over a century of *stilkritik* and I know not what else, with a hand of three or four unintelligible runes! A touch of brashness can even be a virtue in the world of academic 'promotion' and one or two numismatists know this. Mr. Lyon is preaching to a largely converted congregation: his exposition of 'numismatic methods and their limitations' does not need quite that evangelical simplicity. Assemblages (hoards), analyses of metal, partial duplications (die-links), and the rest are commonplaces of archaeology. Coins stand out for having the best and the most of them, and numismatists are the custodians of the largest body of fine metal artefacts and of un-rhetorical record-material in the whole Anglo-Saxon field. If his third section, on numismatic methods, seems somewhat naïve (these methods are not merely 'like those of archaeology'; by-and-large they *are* those of archaeology), in the first two sections he is completely master of the application of archaeological evidence to a thinly documented historical theme seen from an economic viewpoint, and is well acquainted with the scattered literature that deserves a critical bibliography of its own. He need not be ashamed of alternatives or speculation on his part or others'; it is the identification of the problem that matters. The

most fundamental problem of the whole series, that of the relation between a fixed pound of silver and the number of coins actually struck from a, possibly adjustable, pound, is adumbrated in the first section, with several possible solutions to the mystery of Pippin's pound of 264 *denarii*. The largest section is in the form of a 'chronological survey', and is brilliant: here I can only point out a few faults of omission and commission. To begin, how often must I repeat that the 'Provençal light coinage', beginning c. 575, is an original, *not* an imitative coinage? It is the ancestor of all subsequent western coinage, and its solidi do not weigh 'c. 3.9 g.': they weigh precisely 3.86 g., with a deviation of under 1 per cent and are perhaps the most accurate hammered coins of all time. The pre-Crondall English 'mintings of a special nature' are represented by one Frankish-looking piece of Canterbury and *possibly* the odd mock-solidus; that is all. London was not 'temporarily lost to Egbert' (implying union with Wessex); he became king of the Mercians, as far north as Dore, near Sheffield, and his hereditary claim may have been as good as any; but for unknown political or military reasons he resigned it to Wiglaf. The large and well-used coinage of Eadbert is surely the last and best dated of the so-called 'sceat' issues, and its continuity with the so-called 'stycas' is thin. The connection of Alfred's reform with his *burh*-strategy is ingenious but quite unsupported, unless by the use of mint-names at two or three towns, all on the frontier. Domesday shillings may imply twelve pence, but certain church dues in *Domesday Monachorum* only make sense with a six-penny shilling. 'South-east England' is too vague a location for the Switmen ('Witmen') coinage or for any purpose. Kent was an eastern kingdom.

Professor Dolley, on the other hand, has the utmost courage of his convictions in every detail, defending, in vol. 2, the strictest sexennial periodicity for two 'Hand' varieties, and thereby the 'Crux', of Aethelred, against those who still hold marginal reservations. This might seem a matter for more narrowly numismatic advocacy and obscure the fact that everybody gratefully accepts his general thesis and a chronology as tight as that which we have for Henry III and his three successors. On Plegmund and Edward the Elder in vol. 3 he is simply pointing out the numismatist's satisfaction with Dr. O'Donovan's vindication, in vol. 1, of the Archbishop's well-chronicled death in 923 against the 'traditional' date (in fact a modern antiquarian speculation) of 914. Perhaps the same question, whether or not it is in place in *Anglo-Saxon England*, might be asked about Veronica Smart's

corrections to Hildebrand's register of moneyers (vol. 4). The reason seems to be the almost biblical devotion, particularly in Scandinavia and among onomastists, to this great, but now antiquated, work. David Hinton's assessment of 'late' Anglo-Saxon metalwork in the same volume is inconclusive and only mentioned for its strange distribution-map of 'sceattas', Offa's pennies and other things ascribed to the eighth century, which is 'middle' rather than 'late' Saxon anyway. It proves nothing and does not even show the excavated sites (Whitby, St. Augustines), which have produced coins *and* pins, etc. Dr. Hunter on 'Antiquity and sense of the past in Anglo-Saxon England' (vol. 3) is stimulating and uses numismatic material but does not face the fact that the precedents sought and followed by the Saxons and Franks were those of the Christian Dominate of Constantine, not the generalized and idealized Antiquity of the Renaissance and Neo-Classicism. Finally, in vol. 6, is a review-article on the first part of the massive, if belated, publication of Sutton Hoo. Dr. Metcalf covers the discussions of the supremely significant numismatic material on which opinions have swung widely in the thirty years since discovery. It is an exemplar of a proto-historic situation, where judgement must not be hurried, nor delayed by *parti pris*.

I have confined myself to the more obviously numismatic subjects, but no student of Old English coinage can neglect this vehicle. He should neglect no part of it, for an unexpected insight may emerge from any subject.

S. E. R.

Corpus Nummorum Saeculorum IX-XI Qui in Suecia Reperti Sunt: 1. Gotland: (1) Akeböck Atlingbo. Edited by BRITA MALMER and the late NILS LUDVIG RASMUSSEN. Stockholm, 1975, xxviii + 198 pp., 27 plates. (2) Bäl-Buttle. Edited by BRITA MALMER. Stockholm, 1977, xxxiv + 340 pp., 52 plates.

DR. MALMER explains in a preface that the idea of publishing the coins from the Viking Age found in Sweden goes back to the seventeenth century, but that the credit for establishing their systematic recording belongs to the nineteenth-century scholars Bror Emil Hildebrand and Carl Johan Tornberg. More than 150,000 coins, most of them Arabic, German, or English, have been preserved in Swedish public collections, thanks to the law of treasure trove which requires all coins found in Sweden to be offered to the State for redemption. They have, of course, long been studied *in situ* by

numismatists and historians interested in the period, and a general evaluation of their evidence for the flow of silver into Scandinavia, first from the Arabic lands and then from Germany and England, can be found in P. H. Sawyer, *The Age of the Vikings* (2nd edn., London, 1971).

It was the late Dr. Rasmuson, Keeper of the Royal Coin Cabinet in Stockholm, together with the late Professor Sture Bolin of Lund and Professor Walter Hävernack of Hamburg, who primarily inspired the ambitious project which is now bearing visible fruit. It dates back to the early 1950s, when scholars from outside Sweden were offered financial assistance to study the German and English coins, the Arabic coins having been worked on since the late 1930s by the Swedish numismatist Ulla S. Linder Welin. The task of classifying the Scandinavian and Byzantine coins in the hoards was given to Dr. Malmer (herself now keeper of the Royal Coin Cabinet), and so the coverage of the material was complete.

The formidable nature of the project can be seen from these two volumes. With 538 pages of text and 79 plates between them, they nevertheless cover only 15 out of nearly 100 parishes on the island of Gotland alone. Fifty-nine finds are included, varying from single coins to hoards of over 2,000. The clarity of presentation of the material is exemplary. There is a map of each parish on a scale of 1:20,000 to enable the exact find-spots to be identified. General information about each find includes details of the discovery, a summary of the contents (distinguishing between coins that can be traced and those that have been dispersed), and the total weight of the find, estimated where necessary. In the detailed listings the weight of each traced coin is given, together with the diameter (except for English and Irish coins), die-axis (except for German coins), shape (if a fragment), number of peck-marks (or the existence of nicks or notches in the case of Oriental coins) and, by means of symbols, the presence of cracks, holes, mounts, etc.

The English and Irish coins have been listed by and under the guidance of Michael Dolley, to whom Anglo-Saxon historians and numismatists are greatly indebted for the spirited lead he has continuously given since the project began. The coins are classified in accordance with the nomenclature and sequence of types which is largely associated with Professor Dolley and is now generally adopted by students of the series. It is sad to see how much of the Anglo-Saxon content of nineteenth-century hoards has been dispersed without having been properly recorded, but fortunately

the hoards from the present century have generally been fully retained.

The illustrations, especially in the second volume, are dominated by Oriental coins, only about 120 English coins and their derivatives being illustrated in the first volume and about 60 in the second. Unfortunately the plates, prepared from direct photographs and printed on glossy paper, are not up to the standard of the text and are far from ideal if one wants to use them for checking for die-links elsewhere.

In the first volume three hoards with a significant representation of Anglo-Saxon coins are recorded, but in the second volume there is only one. From the 1918 Snovalds find from Alskog parish (SHM 16181) there are 77 English coins from Æthelred *First Hand* to William I *Profile-Cross Fleury* in a total of 1,101; the 1952 Gandarve find from Alva parish (GFC 9851) contained 212 English coins from *First Hand* to Edward the Confessor *Trefoil Quadrilateral* in a total of 693; the 1893 Myrånne find from Atlingbo parish (SHM 9392/3) included 510 English coins from Edgar *Reform* to Cnut *Pointed Helmet* in a total of 1805, but 191 or thereabouts have since been sold or exchanged.

More interesting at first sight than any of these is the 1928 Digeråkra find from Barlingbo parish (SHM 18744) which amounted to 1,323 coins in all. This hoard appears to be completely intact, and the 357 (not 358) English coins listed can be summarized as follows:

Edgar *Reform* 4; Edward the Martyr 2; Æthelred *First Small Cross* 1, *First Hand* 24, *Second Hand* 24, *Benediction Hand* 3, *Second Hand Cross* mules 4, *Cross* 274, *Intermediate Small Cross* 1, *Intermediate Small Cross Cross* mules 2, *Long Cross* 18.

Among the *Second Hand* coins is one of classic style by a moneyer Thurmod who seems to be otherwise unknown for any mint in this reign. It bears the mint-signature of York, hitherto unknown for the type, and it weighs 1.35 g. It should be a talking point for some time to come, and one wonders why it has not been noticed previously. The same applies to the four *Second Hand Cross* mules, which are recorded as including three from the same obverse die. Two are from a common reverse die of Edwine of London, and the third is by Sidwine of Rochester. A die-link between mints is curious, to say the least, where mules are involved. Ryan had another mule by Sidwine of Rochester from the same obverse die but a different reverse

(Ryan sale, lot 815) and he also possessed one by Edwine of London but from a different obverse and reverse (lot 816). This latter coin is now in the writer's collection together with a heavily pecked and crinkled *Crux* coin which is die-linked to it.

The clarity of the hoard-listing makes it stand out that, of the 24 *Second Hand* coins in Digeråkra, no fewer than 20 have a die-axis of 90° or 270° compared with 1 each of 0° and 180° and 2 irregular coins. All 3 *Benediction Hand* coins have 90° or 270°, but in contrast, the 4 *Second Hand/Crux* mules have 0° or 180°. These figures do not look random, but no obvious bias can be seen in the *Crux* and *Long Cross* elements of the hoard. It seemed worth checking the results against the Copenhagen Sylloge, and it quickly emerged that of 65 *Second Hand* coins listed there, 58 had a die-axis of 90° or 270°. The dies for this type are generally thought to have been cut by a single hand (with one or two obvious exceptions such as Lytelman of Ipswich) and one is forced to the conclusion that they must have been so constructed that only two out of the four axes could be used by the moneyer. The same hand seems to have been responsible for the second phase of *First Hand* die-cutting in southern England, where the letters are large, the ethnic ends with a saltire X rather than the small curved x of the first phase, and the coins are generally lighter. When the die-axes are examined, 28 out of 33 identifiable coins of this Southern 2 style in the Copenhagen Sylloge prove to have an axis of 90° or 270°. No bias can be detected in coins from dies of the first phase, nor from those of northern or eastern style. There is no clear evidence of bias, either, in the 6 *Benediction Hand* coins in Copenhagen.

A review is not the place to explore this phenomenon in greater depth, although it is clear that it cannot be attributed to random error. The problem has been laid out as an example of the avenues of research that will surely open up as further volumes appear. More particularly one looks forward to comparing and contrasting the composition of different hoards, with a view to determining whether supplies of coins reaching Scandinavia generally became well mixed with a homogeneous stock of circulating coins, or whether money tended to be hoarded in such a way that different owners would hold their wealth in substantially different combinations of the various issues. For example, the English coins in Digeråkra end with a small number of heavy *Long Cross* pence, most of them unpecked, and one is reminded of some of the Danish hoards—reproduced in the Copenhagen Sylloge—which visibly preserve parcels of such

coins in pristine unpecked condition for many years after they were struck.

Yet there are severe limitations to such armchair research. The form of publication chosen for the Swedish hoards is a corpus, not a sylloge. One can tell for each coin the reign, type, mint, moneyer, and the Hildebrand number which reproduces the obverse and reverse inscriptions: where there is no correspondence of inscriptions with a coin in Hildebrand's catalogue we are told what the departures are, and if there is no close equivalent the coin is illustrated. But it was clearly impractical to check systematically for die-links (though some are noted) or to record subjective die-cutting styles, still less to illustrate every coin. Nevertheless long lists of weights, die-axes, peck-marks, etc. are of limited value if the emerging statistical patterns cannot be subjected to the critical interpretation of the human eye. The volumes in this series will make it easier to prepare for visits to Sweden, but will never be a substitute for them. Stockholm will long remain the Mecca of the serious student of the coinage of the Viking age.

C. S. S. L.

SCBI 23 Ashmolean Museum, Oxford, Part III. Coins of Henry VII. By D. M. METCALF (1976).

THIS Sylloge lists 971 coins of the reign of Henry VII, of which 84 are gold and 887 are silver, no less than 332 being provincial issues of the mints of Canterbury, York, and Durham. As many as 583 pieces are from the E. J. Winstanley collection, purchased and given to the Ashmolean Museum in 1963 by Mr. Herbert Schneider; a further 138 pieces were purchased from the H. M. Lingford collection, made available in 1972 when it was learned that the Ashmolean Museum collection was to be published. Although the terms of the Schneider gift did not allow for the retention of duplicates, there are duplicates listed, e.g. such rare pieces as the sovereigns of type IV, nos. 79–80 and type V, nos. 81–2 and shillings, nos. 759–760, where a university college rather than the University museum is the owner.

Much preliminary work on the coins had been done by Mr. J. D. A. Thompson, who died suddenly in 1970, and Dr. D. M. Metcalf took over the task of publication. Separately listed are the gold coins—angels, angelets, and sovereigns respectively, and the silver coins—open crown, arched crown, and profile portrait issues, the provincial mints of Canterbury, York, and Durham being grouped within these headings. Classification is based on the researches of E. J. Winstanley and W. J. W. Potter, published in *BNJ* xxx–xxxii, to

which the reader must refer if he is to understand the enumeration of the lettering, cross-ends and so on, and it is in this respect that one major criticism can be made. That Potter and Winstanley's analysis is 'lengthy and cannot be safely condensed' is not much use to the reader who has not the three volumes of *BNJ* available, so that he may understand what Dr. Metcalf is saying. Potter, and one does not think of Winstanley in this regard, was never explicit when numbering issues, dies, etc., and a summary, perhaps tabular as in J. J. North's 'English Hammered Coinage', would not only have made this volume more complete in itself but doubtless would have made Potter and Winstanley that much easier to use and understand. Also, the mint marks are not given (as sub-headings) for the half-groats and smaller denominations: reference to the plates is not always helpful so the reader must refer back to Potter and Winstanley or elsewhere.

Having placed the coins in sequence, Dr. Metcalf tries to fit them into the history of the reign, or rather the history of the workings of the mint(s), as the hoard evidence for this period is so meagre. The arguments as to the strict dating of specific issues—such as sequence of the first two issues of sovereign, the date of the introduction of the profile groat, and whether it was, in fact, the work of Alexander Bruchsal—are fairly presented and amply supported by references to other works on coins of the reign. It is difficult, if not impossible, not to agree with the initial paragraph of the Summary—'The absolute chronology within the reign, that is to say the precise dating of each of these many varieties, rests upon a complex set of assumptions, which have been explained as carefully as possible in the preceding pages'. The Summary itself is a chronological list of events relative to the coinage into which the issues of coins, or rather their mint marks, are slotted in a most concise and convenient manner.

The fifty-three collotype plates are of a high standard, reflecting the quality of the plaster casts and the Select Bibliography will be a most useful easy reference to students of the period.

P. D. M.

The Correspondence of Isaac Newton. Volume iv 1694–1709. Edited by J. F. SCOTT. Volume v 1709–1713; volume vi 1713–1718; volume vii 1718–1727. Edited by A. RUPERT HALL and LAURA TILLING. Cambridge, for the Royal Society at the University Press, 1967, 1975, 1976, 1977.

THE Royal Society's edition of the correspondence

of Sir Isaac Newton, now completed in seven volumes, is both a comprehensive record of Newton's life, scientific interests, business affairs, and friendships, and a central source of information for the history of the Mint during the years Newton held office there, first as Warden (April 1696–February 1700) and then as Master (1700 to death). The last four volumes of the Royal Society's edition cover the period when Newton was at the Mint, and it is only with them that students of the British coinage are concerned. Volume iv, published in 1967, was edited by the late Dr. J. F. Scott, the later volumes by A. Rupert Hall and Laura Tilling, and it is a necessary preliminary to a discussion of their contents to say that Dr. Scott printed documentation on Newton's administration of the Mint only when it shed light on Newton himself or was of intrinsic importance, while the editors of the later volumes state in their preface to volume v (p. xiv) that 'we have omitted no part of the Mint business that was conducted by letter or memorandum, even though a good deal of it is of a more or less routine character', and they therefore print practically all extant documentation of this kind for the years 1709–27 which volumes v–vii cover. An appendix to volume vii prints some of the documentation for the years 1696–1709 passed over by Dr. Scott and summarizes other documentation, but there is still an imbalance between the coverage of Mint business before 1709 and the coverage of Mint business afterwards which makes it difficult, for example, to use the volumes as evidence for the comparative weight of business falling on the Mint up to 1709 and after 1709.

The editors have not themselves been specialists on coinage matters, and it is inevitable that numismatists will see some subjects in sharper focus than is offered by the editorial annotation of particular documents. At a different level, the editors, rightly within their terms of reference, never essay an over-all view of the extant materials on Mint administration for this thirty year period. Consequently the objectives of the present reviewer are twofold: to put on record a number of corrections on points of detail, and to offer a very brief sketch of the documentation as a whole. The corrections will be found together at the end of this review.

The character of the material printed in these volumes is shaped overwhelmingly by the nature of the two major surviving sources for the history of the Mint in Newton's time: the correspondence between the Mint and the Treasury, recorded on the Mint's side in the earliest surviving Mint Record Books and also recorded among the Treasury's archives; and Newton's own official papers, taken

over by his successor at the Mint (and niece's husband), John Conduitt, and now preserved in the Public Record Office. The correspondence between the Mint and the Treasury is ample, almost completely preserved, and extends over the whole period, but the bulk of it is correspondence between the Treasury and the Principal Officers of the Mint (Warden, Master, and Comptroller acting as a body) and not correspondence between the Treasury and Newton independently as Warden, or, later, Master, and that has consequences for the presentation of it in these volumes: first, the Treasury's side of the correspondence is often merely summarized by the editors, as not being addressed to Newton personally; second, the Mint's side of the correspondence is not printed where Newton is not specifically involved as signatory or draughtsman of the letter or memorandum; third, the editors are inclined to pass over the final versions of letters as transcribed in the Mint Record Books or among the Treasury's archives, in favour of autograph drafts by Newton where these survive, even where the drafts were emended before being sent or were not the basis of letters actually sent.

The collection of Newton's papers that survives also requires explanation. It is in no sense a comprehensive archive of papers and documents relating to Newton's years at the Mint, for Newton was not an orderly preserver of archive material. Nor is it a fair cross-section of the papers relating to Mint business that passed through Newton's hands, for it is fuller on his earlier years at the Mint than on his later years (and not merely because more business was transacted in the earlier years), and it is also concerned more with the Mint's external business—relations with the Treasury, with the officials of the Edinburgh mint, and with other government departments—than with the day-to-day management of the Mint. Newton's own attitude to documentation is partly to blame, for he was casual with his papers and he no doubt jettisoned many routine items; but some of the blame must almost certainly be ascribed to Conduitt, who as Newton's executor would have needed to abstract and file elsewhere any papers that related to Newton's finances (his finances as Master of the Mint as well as his personal finances), and as Newton's successor in the post of Master no doubt abstracted and kept elsewhere any papers and documents that he needed for his own management of the Mint.

The result is that the Newton papers are distinctly uninformative on internal Mint routine and on Newton's relationship with the three senior Mint officials who carried the brunt of Mint busi-

ness during his years at the Mint: Dr. J. F. Fauquier, Deputy Master *c.* 1697–1726; Hopton Haynes, Weigher and Teller 1701–23 and Assay Master 1723–49; and Thomas Hall, Chief Clerk (or King's Clerk) 1682–1718 and Clerk of the Papers (concurrently) 1684–1718. The absence of material relating to Fauquier and Hall is the more unfortunate since both men were persons of substance outside the Mint, Fauquier a director of the Bank of England and Hall holder of a succession of senior posts in the Excise Office, Customs Office, and Salt Office, and as both were evidently trusted by Newton on a personal level as well as Mint colleagues.

In addition to these two major groups of material there is a scatter of relevant correspondence, memoranda, and the like which the editors have unearthed from a wide variety of other sources. The surviving Mint Record Books are not particularly helpful except for the Mint's relations with the Treasury, since at this time it was only obligatory on the Mint's Chief Clerk (King's Clerk) to 'register the papers which pass between the Treasury and the Mint'—the phraseology is that used by Newton in a memorandum of early 1697 (vol. iv, no. 565)—and Mint business 'below stairs' was either not formally recorded or recorded in another series of books that does not survive. The archives of other Government departments provide a small number of items; and some documents have been preserved because of their interest to autograph collectors, e.g. two orders by Newton directing the Provost and Company of Moneyers to change the edge lettering on the larger gold and silver denominations, which are now, without apparent provenance, in the Burndy Library in New York. The assiduity with which the editors have searched for items of Mint interest cannot easily be judged, but a few items which this reviewer thought at first had been omitted are referred to in editorial notes and one or two others have been omitted because they do not fall within the editors' definition of 'correspondence'. There is no reason to think that any document of real moment has been overlooked.

The list of corrections that follows gives priority to corrections on points of dating and to corrections affecting the identity of those by whom letters were sent or to whom letters were addressed. The list is by no means comprehensive and numismatists should approach each letter and the editorial annotation of it carefully; the biographical information, for example, provided by the editors on Mint personnel named in the correspondence, is sometimes wrong and sometimes inadequate.

The single most important area of editorial confusion is in their identification of the parties between whom correspondence passes. Where correspondence is signed by the three Principal Officers of the Mint the editors rightly caption the letter as being written by 'Mint' to whatever body or person it is directed. Where correspondence is signed by the Warden of the Mint and one only of his colleagues the editors usually caption the letter as being written by 'Newton and X' or by 'X and Newton', when they should in fact caption the letter as written by 'Mint', for the Warden and one of his colleagues formed a quorum of the three officers (see Newton's memorandum of 1697 already cited). Where the correspondence is signed by the Master and Comptroller only, it is not technically the correspondence of the Mint, since there could not be a quorum of the Principal Officers in the Warden's absence, and here it is properly captioned as written by 'Newton and X'. Where, finally, correspondence is signed by Newton only or is not signed but is written in Newton's hand or is evidenced by a draft in Newton's hand, it may be Newton's private correspondence, or it may be official correspondence in relation to matters which fell solely within the province of Newton as Warden (e.g. prosecution of coiners) or as Master (e.g. provision of coronation medals), in which cases it is correctly captioned, within the editors' conventions, as written by 'Newton'. Often though such correspondence is 'Mint' correspondence which for one reason or another does not carry his colleagues' signatures but is not Newton's own correspondence—'Mint' correspondence which only exists in office copies or in draft obviously would not carry such signatures—and the editors are often in error in captioning these letters as written by 'Newton' where they should be captioned 'Mint'. The point is by no means technical, since letters to be sent in the name of the Principal Officers (collectively known as the Mint Board) were intended to express a collective view, even if wholly composed by Newton, and in drafting them Newton must have had different constraints to those which governed his own correspondence.

Corrections and notes to Newton Correspondence

The letters of Mint interest begin at letter 544 (of 14 March 1695/6) and conclude in the chronological series with letter 1498 (of 4 February 1726/7). There are a few more among a section of undated letters with numbers from 1500 to 1553, and a rather larger number in a section of additional letters. The numbers of the letters where corrections or comments are required are given here con-

secutively, but with the additional letters—their numbers are prefixed by the letter X—inserted in their relative chronological position rather than grouped together at the end.

542. (Halley to Newton, undated.) Dr. Scott suggests the date 1695/6, but the letter contains a reference by Halley to 'the other matter of serving you as your Deputy', which must place it after Newton had received the offer of the post of Warden of the Mint (19 March 1695/6); and it also contains a reference to Halley waiting on Newton 'at your lodgings', which presumably places it after Newton had moved from his college rooms in Cambridge to lodgings in London. Halley was eventually appointed Deputy Comptroller (not Deputy Warden) of the Chester Mint, and the letter most probably belongs to May or June 1696 when the appointment of Deputies at the provincial mints was in process.

553. (Newton to Treasury, undated.) Dated by the editors July/August 1696, but it presumably dates after 18 August 1696, since George Macey, described in it as 'late Clerk' to the Warden, was still Warden's Clerk on that date. It is a draft only and it is not very likely that it is the basis of a letter actually sent.

558. This is a note made by Benjamin Overton, Warden of the Mint from February 1689/90 to March 1695/6, of his expenses for the year 1690/1, on which Newton has written a two-line memorandum of his own. It should not have been printed in Newton's correspondence, and the editorial caption 'Newton to the Treasury (?), 1696' is quite wrong.

569. This is captioned 'Newton to the Treasury', but it is a draft by Newton for a letter from the Mint to the Treasury.

572. (Noah Neal to Newton, 15 August 1697.) The writer was Noah Neale (1647–1734), of Stamford Baron, Northants.

579. (Manuscript by Newton, undated.) Dated 1697 by Dr. Scott but Newton refers in it to 'this winter', so it belongs to the winter of 1697/8 and may belong early in 1698.

609. (Mint to Treasury, 8 April 1699.) The petition to which this refers was one from James Hoare's daughter and executrix Lady Ashfield for remuneration for her father's services during the recoinage; not, as Dr. Scott states, a petition on behalf of Hoare's grandson.

X612. This is captioned 'Newton and Neale to the Treasury', but it is a letter from the Mint to the Treasury, Newton and Neale forming a quorum of the Mint Board.

- X616. (Fowle to Newton, undated.) The editors print a grossly inadequate summary of what is quite an interesting letter about Newton's predecessors in the post of Warden. It should be noted that 'the Earl of Denby' is a misprint for 'the Earl of Danby'; that Danby was never Warden, and is not referred to as Warden in Fowle's letter; that the letter does not by any means say, as the summary does, that all Newton's predecessors 'treated the post more or less as a sinecure'; that it does not say, as the summary does, that Fowle himself 'has now been arrested'; and that it is not, as the summary states, 'a petition' by Fowle. The editors date it ?1699 but although it must be later than James Hoare's death on 30 November 1696, a date early in Newton's Wardenship, e.g. early 1697, seems likely.
619. (Stacy to Newton, undated.) This letter was dated by Dr. Scott ?1699, as it carries the implication that Newton was a J.P. for Middlesex, which he certainly was when Warden; but it is addressed to 'Sr Isaac Newton Knt', which should place it after 16 April 1705, when Newton was knighted, and it seems perfectly possible that Newton was still a J.P. for Middlesex in and after 1705.
- X619.2. This is captioned 'Newton to the Treasury', but it is a draft by Newton for a letter from the Mint to the Treasury.
- X626.2. (Mint to Treasury, 25 May 1700.) This relates to Robert Weddell's expenses in prosecuting a counterfeiter; 'Thomas' Weddell is a mistake by the editors. They make the same mistake in letters X633.1, X633.2, and X651, and in the index to volume vii.
- X630.2. This is captioned 'Newton and Stanley to the Treasury', but it is a letter from the Mint to the Treasury, Stanley and Newton forming a quorum of the Mint Board.
631. This is captioned 'Newton to the Treasury', but it is an unsigned copy of a letter from the Mint to the Treasury.
- X631.1. This is captioned 'Newton and Stanley to the Treasury', but it is a letter from the Mint to the Treasury, Stanley and Newton forming a quorum of the Mint Board.
- X631.2. This is captioned 'Newton to the Treasury', but it is a draft by Newton for a letter from the Mint to the Treasury.
632. (Kemp to Newton, 15 Feb. 1700/1.) Dr. Scott states that this was a letter about the trial of a counterfeiter and that it should have been addressed not to Newton but to the then Warden Sir John Stanley; but there is nothing in the letter itself to show that the trial was for counterfeiting, and it may be relevant that Thomas Kemp, who wrote the letter, was Quartermaster of the Tower as well as a moneyer of the Mint.
- X633.2. This is captioned 'Newton and Stanley to the Treasury', but it is a letter from the Mint to the Treasury, Stanley and Newton forming a quorum of the Mint Board.
- X633.6. This is captioned 'Newton and Stanley to the Treasury', but it is a letter from the Mint to the Treasury, Stanley and Newton forming a quorum of the Mint Board.
643. This is captioned 'Newton to the Treasury', but it is a draft by Newton for a letter from the Mint to the Treasury.
- X650.1. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin (Lord High Treasurer).
654. This is captioned 'Newton to ?Lowndes'—Lowndes was Secretary to the Treasury—but it is a draft by Newton for a letter from the Mint, and probably for a letter not to Lowndes but to an official in the War Office. The editors of volume vii record Sir John Craig's opinion that the letter was written in 1717, and not in late 1702 as supposed by Dr. Scott, and it is clear at any rate that the letter was written in or after 1714, for it refers to William III in the past tense and also to 'His Majesty' (sc. George I) now reigning.
656. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin.
657. This is a draft by Newton for a letter from the Mint to Godolphin, and is correctly captioned 'Mint to Godolphin' by Dr. Scott. In fact the letter as sent survives among the Treasury archives, and was signed by Newton alone; but since he drafted it as a letter from the Mint it should be classed as such.
666. This is captioned 'Newton to Godolphin', but it is a letter from the Mint to Godolphin.
675. This is captioned 'Mint to Godolphin', but as it is signed by Newton and the Comptroller (John Ellis) alone, its status is uncertain.
725. This is captioned 'Newton to the Goldsmiths' Company', but it is a draft by Newton for a purely formal letter to be sent by the Lord Chancellor to the Goldsmiths' Company. It should not have been printed in Newton's correspondence.
- X726.3. This is an undated draft for a letter from Newton was prone to composing drafts and the Edinburgh mint. The editors suggest the date 'summer 1707' and that the peer is Lord Seafield, Lord Chancellor of Scotland, but say that a date

- in 1708 is also possible. This reviewer would like to suggest that it is a draft of a reply to letter 759 below, a letter dated 10 August 1709 sent to Newton by Lord Lauderdale, General of the Edinburgh mint. Letter 763 below is a rather different draft of a reply to Lauderdale's letter, but Newton was prone to composing drafts and the existence of letter 763 is itself no obstacle to this interpretation of letter X726.3.
729. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin.
731. (Newton to Gregory, undated.) Dr. Scott rightly suggests that this is a draft of Newton's reply to letter 727; the editors of volume vii are wrong to raise the possibility that it is a draft of his reply to letter X727.4.
- X736. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin.
740. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin.
741. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin.
- X744.2. This is captioned 'Newton to Godolphin', but it is a draft by Newton for a letter from the Mint to Godolphin.
754. This is printed again below as letter 964, Newton to Hercules Scott, 28 January 1712/13, and is not, as Dr. Scott suggests, a draft of a letter from Newton to Allardes of April/May 1709.
756. An undated draft of a letter from Newton to an unnamed peer connected with the Edinburgh mint. Dr. Scott captions it 'Newton to Seafeld', which may well be correct (cf. letter 757), and states that it is given the date 1 June 1709 in the Mint Record Books; that may be a correct statement also, but the date must be wrong, for the letter was not written until after 10 August 1709, when the Mint made a report, mentioned in the letter, on a petition by the moneyers who had been at Edinburgh during the recoinage of 1707–9. A date in August or September 1709, rather than June, is also supported by a phrase in the letter about Godolphin being absent from London 'during this vacation'.
804. This is captioned 'Newton and Ellis to the Treasury', which is technically correct. However, the Warden was away from London at the time—this is explicitly stated in letter 806—and the letter is effectively from the Mint to the Treasury.
806. This is captioned 'Newton and Ellis to Henry St. John', but the letter says that Newton and Ellis are answering a letter addressed to the Officers of the Mint in the Warden's absence.
808. This again is captioned 'Newton and Ellis to the Treasury', but is effectively from the Mint to the Treasury.
852. This is captioned 'Newton to Oxford', which is correct (cf. Newton's memorandum of c. 28 July 1711, letter 861), but it was drafted in a form which his colleagues could also have signed and Newton's memorandum suggests that they deliberately omitted to do so.
867. This is captioned 'Newton and Peyton to Oxford', but it is a letter from the Mint to Oxford, Peyton and Newton forming a quorum of the Mint Board.
990. This is captioned 'Newton to Oxford', but it is a draft by Newton for a letter from Newton and Edward Phelipps (Comptroller) to the Treasury. As the letter related to a matter specifically referred by the Treasury to Newton and Phelipps, the Warden's signature was not necessary.
- 996A. This is captioned 'Newton to Oxford', but it is a draft by Newton for a letter from the Mint to Oxford.
- X1006. (Fauquier to Newton, undated.) The editors date this ?July 1713, but the only dating indications in the letter are that gold was shortly to be melted and that the melter at the time was named Cartlitch. As gold was coined every year from 1705 until Newton's death and John Cartlitch was melter from at least 1707 to his death on 30 September 1726, eight days after Fauquier, the letter could belong anywhere within a twenty-year period.
1030. This is captioned 'Newton to Oxford', but it is a draft by Newton for a letter from the Mint to Oxford.
1035. This is captioned 'Newton and Peyton to Oxford', but it is a letter from the Mint to Oxford, Peyton and Newton forming a quorum of the Mint Board.
1085. This is captioned 'Newton to Oxford', despite the fact that it is actually signed by Newton and Phelipps; it is not signed by Peyton but is effectively a letter from the Mint to Oxford.
1098. This is captioned 'Newton and Peyton to Shrewsbury', but it is a letter from the Mint to Shrewsbury, Peyton and Newton forming a quorum of the Mint Board.
1118. This is captioned 'Newton and Peyton to the Treasury', but it is a letter from the Mint to the Treasury, Peyton and Newton forming a quorum of the Mint Board.
- 1176A. An undated draft of a letter from Newton

- to an unnamed person connected with the administration of Scotland. The editors make the tentative suggestion that the intended recipient was Lord Lauderdale (see note on letter X726.3 above), but this cannot be right, for the letter starts with the word 'Sir', i.e. is addressed to a commoner, and Newton's correspondent was also evidently a member of the House of Commons. Perhaps he was Sir David Dalrymple, Lord Advocate.
1250. This is captioned 'Newton and Sandford to the Treasury', but it is a letter from the Mint to the Treasury, Sandford and Newton forming a quorum of the Mint Board.
1251. This is captioned 'Newton and Sandford to the Treasury', but it is a letter from the Mint to the Treasury, Sandford and Newton forming a quorum of the Mint Board.
1253. This is captioned 'Newton to the Treasury', but it is a draft for a letter from the Mint to the Treasury.
1273. This is captioned 'Charles Stanhope to Newton', but it begins 'Gent' (i.e. Gentlemen) and is obviously a letter to the Mint Board.
1278. This is captioned 'Newton and Sandford to the Treasury', but it is a letter from the Mint to the Treasury, Sandford and Newton forming a quorum of the Mint Board.
1308. (Charles Godolphin to Newton, 17 December 1718.) Charles Godolphin—he was not 'Sir Charles Godolphin' as the editors believe—was a brother of Lord Treasurer Godolphin and an old friend of Thomas Hall, the Mint's Chief Clerk. His letter expresses dissatisfaction at the unwillingness of Hall's executors, who were Newton himself, Hopton Haynes, Richard Walker (Hall's clerk and deputy at the Mint), and Revd. George Martin, a London clergyman, to release capital from Hall's substantial fortune to Hall's son on his forthcoming marriage, despite the fact that Hall's will instructed his executors to act in concert with the Godolphin family, who favoured the match. The behaviour of Newton and his fellow executors seems to have been perfectly proper, all the more so because—and this the editors have not noticed—the younger Hall's bride-to-be seems to have been Frances Quicke, Charles Godolphin's great-niece, which would give the Godolphins a pocket interest in the wedding.
1312. This is captioned 'Thompson and Newton to the Treasury', but it is a letter from the Mint to the Treasury, Thompson and Newton forming a quorum of the Mint Board.
1433. This is captioned 'The Treasury to the Mint', but it is a letter from the Lords Commissioners of the Treasury jointly addressed to Newton, to the Secretary of the Privy Council of Ireland, and to the Secretary of the Treasury (see letter 1434).
1446. This is captioned 'Newton to the Treasury', but although it is signed by Newton alone it was drafted by him as a letter from the Mint to the Treasury.
1483. This is captioned 'Newton to the Treasury', but this is a draft by Newton of a letter from the Mint to the Treasury.
1495. This is captioned 'Newton to the King', but this is a draft by Newton of a letter from the Mint to the King.
1496. (Haynes to Newton, 6 September 1726.) The second paragraph of the letter as printed refers to a 'Mr. Whitacre', but the reading should probably be 'Mr. Whitacre', for a James Whitaker was Haynes's clerk and fireman in the Assay Office from some point in the 1720s until his death from rabies in December 1732. At the end of the paragraph the editors do not annotate 'Mr. Vanderesh'; but this was Henry Vander Esch (c. 1691–1768), Deputy Master of the Mint c. 1727–62. The letter constitutes the only direct evidence that Vander Esch held a post at the Mint before Newton's death.

H. E. P.

Coinage in Medieval Scotland (1100–1600): the Second Oxford Symposium on Coinage and Monetary History. Edited by D. M. METCALF (British Archaeological Reports 45, 1977): viii + 198 pp. £4.00.

THE preface to this commendably useful collection of ten papers contains the remark that 'many numismatists have in the past verged towards antiquarianism: and historians have sometimes felt nervous about exposing their numismatic inexperience in the face of what they imagined to be an impenetrable craft mystery'. It may therefore be useful for a reviewer who is a historian to ask himself how far the volume has succeeded in dispelling his real or potential fears.

The most formidably technical of the contributions, at first sight at least, turns out to be mainly the work of historians. Dr. John M. Gilbert has compiled, with the help of seven other scholars, a series of tables presenting references to sterling in relation to the 'usual money' of Scotland and to the exchange rates and relative values used in Anglo-Scottish and Franco-Scottish monetary transactions down to about 1600. Used with due caution, these tables will indeed be useful tools.

although their page layout is at times rather cramped. It is encouraging to find that a purely scientific exposition, such as Dr. D. M. Metcalf's description of experiments to assess the quality of Scottish sterling silver between 1135 and 1280, can be eminently understandable. Even in an area in which currency and economic policy intertwine closely, clear presentation carries the day. Dr. C. E. Challis contributes 'Debasement: the Scottish experience in the fifteenth and sixteenth centuries' and succeeded in disentangling for the present reviewer, who has no claims to be an economic historian, the differences between debasement and currency depreciation. He reminds us that, in the sad old tale of how Scots money depreciated, 'the rot set in during the reign of Mary, but it was in that of her son, James VI. that most damage was done': a judgment which has yet to be fully appreciated by general historians of later sixteenth-century Scotland. Numismatic and administrative complexities seem rather to outweigh the undoubtedly knowledgeable account which Mrs. Joan E. L. Murray provides of the organization and work of the mint between 1358 and 1603. Her study of the famous and controversial 'black money' of James III tackles a formidable set of problems and tentatively identifies the condemned currency as 'Crux Pellit' 3d. pieces. But the argument here is rather at the level where a historian has to take the numismatic conclusions on trust.

It is natural that for the earlier Middle Ages documentary evidence on coinage should be very thin indeed and here the nervous historian might well expect to find himself awash in a sea of numismatic jargon. But it is not so in the present volume. Dr. Metcalf presents a lucid exposition of the evidence of Scottish coin-hoards for monetary history from 1100 onwards and not only dispenses sound warnings about the pitfalls of interpreting hoard evidence, but also prints a valuable annotated bibliography of known hoards which will be a solid basis for future studies. Mr. N. J. Mayhew offers a broadly based study of 'Money in Scotland in the thirteenth century' which seems to the present reviewer to offer some of the most exciting conclusions to emerge in the volume. In assessing the numismatic evidence for the alleged 'Golden Age' of Alexanders II and III, he concludes that the growth of coinage in the course of the century was eight- or even ten-fold. Making calculations of money supply in relation to the (admittedly speculative) estimates of population, he suggests that if every Scotsman then had 2s. 7d. in his pocket, every Englishman had 3s. 4d., and points out that 'Scotland was by no means as poverty-stricken as has

sometimes been suggested'. He wisely also indicates some necessary qualifications to this rosy picture, but even so the historian of thirteenth-century Scotland must be grateful for illumination on an ill-documented era. One of the bases of Mr. Mayhew's study is the fundamental work of Mr. Ian Stewart on the volume of early coinage, calculable from die-analyses. A fuller version of this article is promised for future publication.

Two further articles complete the volume. Mr. S. E. Rigold's brief commentary on the evidence of site-finds and stray losses for currency studies is suitably cautious and reveals the need for proper cataloguing of the nine drawers of envelopes with coins which the Inspectorate of Ancient Monuments in Edinburgh holds as a result of finds from 'guardianship' monuments. Professor Ranald Nicholson contributes a general historical survey of Scottish monetary problems in the fourteenth and fifteenth centuries, which presents sane and intelligent conclusions in an area where hard information seems difficult to find among the documents. Professor Nicholson does his best, but it may be that further advances in our knowledge will come, partly at least, from rigorous technical studies such as that of Dr. Challis on debasement. Only after the numismatists have cleared the ground can increasingly effective general work be attempted.

The volume has appeared with speed and inexpensively. Perhaps there has been a little too much haste: there are a number of trifling typing errors; the maps at pp. 5 and 7 lack captions; and in the reviewer's copy pp. 65-6 have been bound in reverse. Editorial work is sound, but it is a little confusing to have not only a general list of abbreviations at the front but also five additional lists for particular articles on other pages.

It is a volume to be welcomed and appreciated. This historian's worries about its contents proved groundless, on the whole. A little effort to discover what an allied discipline can and cannot offer is energy well spent.

G. G. S.

The Architectural Medal. England in the Nineteenth Century. By JEREMY TAYLOR. London: British Museum Publications Ltd. ix+244 pp., 297 illustrations. £18.50.

It is an indication of the novelty of this admirable book that one has to go back half a century or more in search of works to compare it with. The literature of English medals as a whole, and of nineteenth-century medals in particular, mostly pre-dates 1930, the year as it happens in which

Forrer wearily terminated his second supplement at the letter S. After that, in 1937, Colonel Grant produced his List as a kind of emergency measure, fearing that for lack of publication the very existence of a whole range of medals would be forgotten and lost beyond recall. The subject then remained dormant until the last decade or two. Now time has been at work: the art history of the nineteenth century has become a lively industry, and we are no longer surprised to find the medals treated with the same serious respect as other arts and activities of that period, but are gratified to find that it has been done so well.

In compiling a medal catalogue of this kind there must be some choice about how much attention to give to the subject matter, and how much to the medals and medallists. The two things can be quite unrelated. However in the present case the architecture (for the most part) and the medals are both seen against the same nineteenth-century background. Dr. Taylor has given due attention to each: and, in his thoughtful introduction, has dealt with the histories of the architecture and of the medals together, showing how here and there they throw light on each other. This is a refreshing approach, and far more productive than imposing a rigid separation of the two subjects. He has also made what he can of the available sources to provide a broad view of nineteenth-century medal production in general such as has hardly been attempted before.

The cataloguing of a substantial body of about four hundred nineteenth-century medals is of itself an important and welcome contribution, for medal studies of this period have long been hampered by lack of publication, and above all of illustration. It is probably true to say that the majority of the medals in this book have not been described in any previous work, and fewer have been illustrated. A good number of them were described and illustrated in Eidlitz, 1927, who is much the most important precursor, although his aims and method were somewhat different. Dr. Taylor has given all the Eidlitz references, about ninety in number, but the chief value here is that Eidlitz illustrates some of the variants on the same building that are not shown in the present book. Otherwise a certain number of the medals have been described, and a few illustrated, in other early catalogues such as 'Medallic Illustrations', Grueber, Hocking, Storer, etc.; and six of them in Mr. Beulah's article of 1967 on the Art Union Medals. But now the concentrated display of medals in the present work begins to tell more about the character of nineteenth-century medals in general terms,

and about the output of certain firms and engravers, than it has been easy or possible to gather previously.

Some judgement and decision are required about what constitutes an architectural medal. Architectural types on medals have always had considerable appeal, but there is no fixed formula. Dr. Taylor has gone to some trouble to define what he does and does not admit, and there are few cases that anyone would dispute. He naturally prefers medals that show the correct architectural form, but accepts indistinct or 'picturesque' views as second best. He understandably bends his own rules once or twice, and I am sorry that he did not bend them to admit Bowcher's fine medal of 1897 showing the Huxley Building at South Kensington.

The medal description, and the transcription of legends and signatures, often so unreliable in the past, appears to have been done with great care, as one would expect in these days. Signatures in particular are critical and are seldom clear in photographs. I have noticed only one misreading of any consequence, where on medal no. 119a GIESON should read GIBSON (The sculptor. This obverse die dates from 1831). I was doubtful about the reading w. WYON on medal 18a, St. Michael's, Coventry, where earlier writers have seen only WYON. It could perhaps be one of William's early works. Clouds on relief sculpture, for which Flaxman blamed Bernini and his followers, are not part of the neo-classical vision, and I doubt if the mature Wyon would have willingly included them. There are no more clouds in this book until the 1890s.

The catalogue commentary is mainly devoted to the architecture. It informs us about the buildings and the architects, and indicates their place in architectural history. References to standard or special literature are invariably given. The arrangement of the catalogue in order of building date reinforces the theme, and the reader is engagingly conducted, if he so wishes, along the historical path of changing building styles and purposes. We can readily accept Dr. Taylor's discovery that the medals provide an important new window through which the architectural subject can be viewed. This applies more in the early part of the century, before the foundation of the R.I.B.A. in 1834 and of such journals as *The Builder* in 1843, and before the growth of a general concern about the keeping of public and private records. The medals draw attention to some little-known architects, and to some buildings prestigious in their day but now forgotten and probably pulled down. One or two of the lengthy medal inscriptions that we are familiar with, packed with information but artistically dis-

appointing, provide facts not otherwise known. At the same time the decades 1820 to 1850 were the most productive of architectural medals, as Dr. Taylor has shown, and of course a time of vigorous building activity. As it happens the latest edition of Colvin's Dictionary has appeared since this book was prepared, and assigns one or two more architects: the *Pantechneke* of 1823, for example (no. 76a), is now known to have been designed by Whitwell.

Photography arranged as here alongside the text seems to me a most welcome feature of the book, although presumably more expensive to do. Half the message is textual and half pictorial, and in such cases it is always frustrating to find the two separated. The photographs are of course primarily intended to illustrate the architecture, and for this reason are confined to the architectural faces of the medals; whereas many of the counter-faces, portraits or compositions, would be interesting to see but are not shown. From the medallic point of view this is a pity. No one will dispute the value of illustration, or that it must contribute to the study of the medals in a number of vital ways, and one trusts that any future catalogues will be fully illustrated. One of the visual exercises is the question of type-sources, which Dr. Taylor discusses in connection with the architectural views, and in a number of cases he has identified the engraving from which the medallist must have worked. This is an interesting pursuit, leading the enquirer into the fields of book and print production as well as of contemporary journals. Artists and engravers were always more numerous than medallists, and quicker off the mark, and it is probable that in almost every case a published print came into existence first and was used by the medallist as his source.

It might be thought that all nineteenth-century medals could be dated with ease, but it turns out that this is far from true. No doubt most of the uncertain cases would yield to perseverance. Prize medals are often deliberately left undated, though the reason escapes me. In some cases Dr. Taylor has quoted the museum accession date, which at least provides a ceiling, as do award dates if given. Provenances and accession dates are often informative if known, and are well worth quoting. Some of the suggested dates probably need shifting considerably. For example it is doubtful if B. Faulkner began his career much before 1819, and he can hardly be given a medal of 1805 (no. 62a). The Beaumont School medal (no. 55a) should be later than 1870 if we take the lettering style as a guide. Grant seems to assign it to the

Wyon firm in 1875, but also to Allan Wyon in 1894. Either could be right, though Grant may be using award dates for want of better, as he sometimes does. The date, *c.* 1824, for the Manchester Royal Institution medal (no. IIIa) is presumably a misprint for *c.* 1834. Forrer's Supplement makes this date clear, and of course Wyon only attained A.R.A. in 1831.

The main sources used by Dr. Taylor for his dictionary of 'medallists, sculptors and publishers' are Forrer and, as far as applicable, R. N. P. Hawkins's dictionary. For the nineteenth-century English engravers one realizes that Forrer is still indispensable even if he or his informants are occasionally garbled or inaccurate. Modern researches such as those of Mr. Hawkins provide a much-needed certainty about identities and dates, but he does not attempt to cover the medallists systematically since this is not precisely his province. Most of the medal makers and engravers whose signatures appear in this book have been at least noticed by Forrer or Hawkins. A few are to my knowledge still untraced, such as E. Cross and H & SS. But the signature G. L. must surely be the German firm Loos.

The other signatures on the medals, which comprise sculptors, artists, and designers (DEL., DES., or simply D.); and what one might call instigators (DIREX., or simply D.), are less well covered by Forrer. Some of these have been brought into the dictionary, and some not. It is a pity that more research was not done on some of these names to modernize our knowledge and make the dictionary that much more useful. Tiffin and J. C. Grundy can be identified. Joseph Mayer and James Gamble are given entries but treated as unknowns. This is unfair to Mayer, and not quite fair to Gamble, who worked for years on the architectural ornament at South Kensington, and in particular on the buildings shown on his medal, the Horticultural Buildings and the Albert Hall. John Gibson the sculptor has already been mentioned. This dictionary is nevertheless a fine piece of organization and provides nearly all the needed information or references in a convenient and well laid out form. It could usefully be enlarged and built upon for wider purposes, but a lot more work needs to be done. The Index to this book is extremely comprehensive, and therefore a valuable piece of work in itself; and all names, and even such initials as I have mentioned above, can be traced to their context. (I noticed that 'James Tate, Headmaster', of medal no. 163a, is called a bishop in the Index for some reason, but the D.N.B. has no knowledge of it.)

In his Introduction Dr. Taylor discusses the variety of motives and purposes for which the medals were struck. He gives an enjoyable account of Charles Fowler's rather distinguished Meat Market building at Exeter (completed in 1837), and of Benjamin Wyon's elegant little medal commemorating it. It is interesting to read in the architect's own words how the medal came to be commissioned from Wyon. Interesting too that the architect should have stressed the durability of medals as a record—echoing the common sentiment of all writers from Evelyn down to the middle of the nineteenth century—and ironic, as Dr. Taylor tells us, that since the destruction of the building in 1942 'the medal now provides a true elevation not published elsewhere'.

Dr. Taylor has in my opinion somewhat overstated the part played by new technology in medal making at the beginning of the century. It applied to coinage but far less so to medals. The contribution of the reducing machine to the initial cutting of such dies as the Gresham medal of 1844 is also to my mind overstated. There appears to be no first-hand evidence on the interesting question of just how much help the engraver derived from this machine at different periods in its early evolution. All the indirect evidence seems to suggest that it was developed as a really effective tool during the decades 1860 to 1900. Mr. Pollard's article of 1971 referred to by Dr. Taylor is important but does not answer this precise question.

It should be noted that Britton's Cathedral Antiquities did not come out in 1818, but was issued in parts over the years 1814 to 1835. This has some bearing on the author's discussion of the dates of Davis's cathedral medals.

I would have welcomed a clearer expression of opinion on the intriguing question of how complete the catalogue is likely to be. And did Dr. Taylor exhaust the British Museum Collection? He hints at a second volume, and on page 24 seems to imply that there are plenty more architectural medals. But surely there cannot be a great number still undiscovered, and certainly not medals of any distinction by known engravers. Some prize medals have been issued in such small numbers that examples are hardly known, although they are often well recorded. There are for example the Baly and Moxon medals of the Royal College of Physicians, which show their original building by R. Smirke, now Canada House. The R.I.B.A. George Godwin medal mentioned by Dr. Taylor on page 212 has only been awarded from time to time and is now discontinued. The same is true of the R.I.B.A. Pugin medal, which strangely is not mentioned at all. The author invites his readers to send him details of omissions, and it is likely that he himself is eagerly waiting for a clearer picture to emerge.

But it would be unfair to expect this book to make good all the very considerable deficiencies in our knowledge of nineteenth-century medals. In addition to opening our eyes to many general aspects of this study, the author has handsomely achieved his central purpose of presenting the architectural medal to our view, and the book will without doubt occupy a place of lasting importance in the literature of English medals. The disciplined handling of information, and the standard of presentation do credit alike to author and publisher, and we should be well content if any future publications of a similar kind were to reach the same standards.

T. S.

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*Detailed reports. Ibid., ii (no. 3), September 1977-iii (no. 2), June 1978. Include U.K. £5 and £2, 1887, and sovereign, 1966; sovereigns 1974 and 1976, 1963 and 1967; Two Pounds 1902; sovereigns 1957 and 1959.

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Seals

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*The works asterisked have been added to the library by donation, exchange, or purchase. The other publications noticed are restricted to contributions to periodicals and composite works, and exclude (in addition to this Journal) Coins and Medals, Spink's Numismatic Circular, and Seaby Coin and Medal Bulletin. Separately published books which have not been received by the Society are not included.

PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 1978

All meetings were held at the Warburg Institute, the President, Mr. Woodhead being in the chair, except at the meetings in April and November.

On 24 January, a paper by Mr. Marvin Lessen, entitled 'The Cromwell Lord Protector Medal by Simon was read on his behalf by Mr. Linecar.

On 28 February Mr. John Alexander and Mr. Allan Paul Hawkins were elected to Ordinary Membership. Mr. John Brand read a paper entitled 'The Exchange and the Mint'.

On 30 March Mr. Robin Baker, Mr. John Burton, Mr. Derek Jobbins, Mr. U. Rosales, and Mr. S. L. Whipple were elected to Ordinary Membership. Mr. Baker was formally admitted to Ordinary Membership. The programme was devoted to exhibitions and short papers relating to tokens and jettons. Mr. Robert Thompson read a paper on initials on seventeenth-century tokens; a paper by Miss Archibald and Mr. Thompson on a rare contemporary catalogue of eighteenth-century tokens was read by Mr. Thompson; Mr. Morley read a paper entitled 'Jettons and the Spanish Armada'; Mr. Mernick read a paper on the Central European group of Jettons; and Mr. Rigold read a paper on the Coventry find of Nuremburg Jettons.

On 25 April Mr. Blunt, Vice-President in the chair, Mr. Edvard Rémy Duncan Elias was elected to Ordinary Membership. Mr. Davis read a paper on the Long Cross coinage of King Henry III.

On 23 May Mr. J. Eaglen and Dr. Patrice Josset were elected to Ordinary Membership. The President presented the Sanford Saltus Medal for 1977 to Mr. Stuart Rigold. Dr. Kent read a paper on the Waltham St. Lawrence hoard of Ancient British Coins.

On 27 June Professor Martin Biddle, Dr. J. Conte, and Mr. J. Zoehout were elected to Ordinary Membership. Dr. Pauline Stafford read a paper entitled 'Some Historical Implications of Regional Production of dies under Aethelred II'.

On 26 September Mr. J. Greenaway and Mr. Frank Millward were elected to Ordinary Membership. A paper on the striking of proof and pattern coins in the eighteenth century by Mr. Dyer and Professor Gaspar was read by Mr. Dyer.

On 24 October Council's proposals for Officers and Council for 1978-9 were read out together with their proposals for subscription rates for 1979. Mr.

David P. McBride, Mr. Robert Sadler, Dr. Irving Schneider, and Mr. Gerald G. Sommerville were elected to Ordinary Membership. Mr. Julian Metcalfe was elected to Junior Membership. Mr. Wood read a paper on the Edwardian pence of Fox group X.

At the 75th Anniversary Meeting on 28 November, Mr. Blunt, Vice-President in the chair, the following Officers and Council were elected for 1979.

President: P. Woodhead, F.S.A.

Vice-Presidents: C. E. Blunt, O.B.E., F.B.A., F.S.A.; G. V. Doubleday; C. S. S. Lyon, M.A., F.S.A., F.I.A.; S. E. Rigold, M.A., F.S.A.; H. Schneider.

Director: J. Brand.

Treasurer: R. J. Seaman, F.I.B.

Secretary: W. Slayter.

Librarian: R. H. Thompson, A.L.A.

Editors: Mrs. M. Delmé-Radcliffe; N. J. Mayhew, M.A.

Council: Miss M. M. Archibald, M.A., F.S.A.; M. A. S. Blackburn, M.A.; C. E. Challis, B.A., Ph.D., F.R.Hist.S.; R. Davis; G. P. Dyer, B.Sc.; A. J. H. Gunstone, B.A., F.S.A.; R. A. Merson, A.C.A.; P. D. Mitchell; Mrs. J. E. L. Murray, M.B.E., M.A.; H. E. Pagan, M.A.; Miss E. J. E. Pirie, M.A., F.S.A. Scot.; J. Porteous, M.A.; C. J. Wood, B.Sc., F.G.S.

The proposals of Council that the annual subscriptions for 1979 should remain unchanged were approved.

In the unavoidable absence of the President, his Presidential Address was read by the Director.

Our Honorary Member, Mr. Elmore-Jones was presented with a specially bound copy of Vol. XLVII of our Journal, which we had dedicated to him. The Secretary, Mr. Slayter, was presented with a special casting of our 75th Anniversary Medal by the Royal Mint, having a leopard on the reverse, instead of floral emblems.

EXHIBITIONS

March

By Mr. Nigel Clark. Sixteenth- and seventeenth-century tokens.

1. Lead token of the sixteenth- or early seventeenth-century.

2. Photograph of unpublished(?) token of William Wright of Stone, Staffs (?).

3. Unpublished(?) token of James Fisher of Londonderry.

4. Unpublished(?) token of Thomas Hurley of Oxford.

5. *a.* 'Normal' token of John Brenn of Ipswich (Suffolk W164, Cranbrook 164a) showing him to be married to M . . . in 1659.

b. 'Unpublished' token by the same issuer also dated 1659 on the same side as that indicating him to be unmarried/divorced etc.(?)

6. *a.* 'Normal' token of Jeffery Willison of Newton (Lancs. W88 of Cambs. W166, but now firmly attributed to Bucks.).

b. Another piece struck for same issuer but over (or under) a token of a hitherto indiscernible issuer.

7. Token of Humphrey Bodicott of Oxford (Oxon. W124) struck over (or under) one of William Selby and Richard Rands of Northampton (Northants W74 var.).

8. *a.* Token of Stephen Carr of Attercliffe, Yorks., similar to that described as Yorks W9 but of very crude workmanship, possibly of 'local' manufacture or a contemporary(?) forgery, being spelt ATTERCLIFE (possibly an error by Fewster), having inverted Ns and with the initials S and C being (unusually) above the wife.

b. 'Unpublished' token of the same issuer being a $\frac{1}{4}$ d instead of a $\frac{1}{2}$ d bearing several of the same characteristics of the $\frac{1}{2}$ d displayed.

9. Token of Edw. Nourse of Bishopsgate, London (London W247) being the only one(?) of the series to contain a full weight of metal for its face value.

10. Token issued by B.A.R. at the Harpe in the Strand (London W3002) said to be struck in facsimile of the (Royal) tokens of the largest size which were also current at this period and said to be the only token of the series to resemble them.

11. Token issued by William Gilbert of Coventry (Warwicks. W76) which is one of two tokens of which William Gilbert (of Essex Tokens and Unpublished Seventeenth-Century Tokens renown) wrote 'No ancient coin, however, that I possess (Beautiful and interesting as many of them are), can have the same human appeal to me of the token of . . . or that of . . . ; each of which was issued by an ancestor of my own.

12. Reverse brockage of the token of Robert Coarson of Darlington (Durham W18). These tokens seemed prone to the same manufacturing faults as current coins.

13. Token issued by Joseph Knibb of the famous clockmaking family of Oxford. (Oxon. W151).

Knibbs clocks were of better manufacture than his token, having 12 numerals on the face instead of 11!

14. A strange brass 'token' of Joseph Phillippus of Stratford-upon-Avon (cf. Warwicks. W153) apparently faithful in detail to Taylor's description of the original tokens but being larger(?) and thicker(?) in the flan and apparently later, and in no way manufactured to deceive either the local public of the time or subsequent token collectors. Its purpose remains a mystery.

By Mr. G. Berry

A seventeenth-century token of Watford struck in leather.

By Mr. C. Brunel

A seventeenth-century token. O. The Porter and Carr = Three tuns. R. In the Minories = M.B. Unpublished.

By Mr. R. N. P. Hawkins

Nürnberg Counters for England.

(a) Portraying monarchs

	Maker
1. Charles II	Cornelius Lauffer
2. " "	Lazarus Gottlieb
3. William and Mary	" "
4. " "	" "
5. " "	Johann Weidinger
6. William III	Johann Heinrich Metzger
7. George I	'L' = Johann Gottlieb Lauffer
8. " "	Johann Jacob Dietzel
9. " "	Cristian (sic) Sigmund Anner
10. George II	'I.D.' = Jacob Dietzel
11. " "	'IAV' = Johann Adam Vogel

(b) of an individual

12. William Hall
'PAINES BRINGS GAINES'

By Mr. G. Berry and Mr. P. Mernick

16. Unclassified late medieval reckoning counters.

By Mr. Gavin Scott

An 1819 shilling engraved HE/Royal/Charter 26th Oct. 1859 on obverse. Refers to the wreck of the steamship Royal Charter off Anglesey when returning from Australia to Liverpool. Among the very few survivors was a seaman with these initials. The story is described from contemporary sources in the April 1978 issue of Seaby's Coin and Medal Bulletin.

By Mr. W. Slayter

1. A half-crown token in copper, issued by Birmingham Workhouse in 1788. Countermarked w on obverse and reverse. D & H 1a.

2. A similar token in white metal. On the reverse, the words 'AND SIXPENCE' have been hammered out, to convert the token to a two-shilling piece. D & H 2a.

3. An 1812 penny token, bearing a view of Birmingham Workhouse. Davis 148 40.

4. A 1787 Wilkinson Token, similar to the half-penny token, D & H 336, but struck in silver, and inscribed 'FINE SILVER' on reverse. Current for 3s. 6d. D & H 337.

5. Gold token for 40 shillings issued in Reading in 1812 by John Berkeley Monck. Davis 29 1.

Photograph of the portrait of John Berkeley Monck in Reading Museum and Art Gallery.

May

By courtesy of Messrs. Baldwin, to illustrate the paper by Dr. Kent.

Ancient British coins similar to those in the Waltham St. Lawrence Hoard. They are said to have been found on the Thames foreshore near Kew Bridge.

By Major C. W. Lister

Gallo-Belgic Coins

- | | |
|---------------------|--|
| 1. A Stater | (Ambiani) |
| 2. A quarter Stater | " |
| 3. B " | " defaced dies |
| 4. C " | " |
| 5. D " | " |
| 6. E " | " |
| 7. F " | " found at Pagham, Sussex. |
| 9. " | " Addeddomaros, found near Chelmsford. |
| 10. " | " Addeddomaros. |

By Mr. A. Merson

A medallion of Sir Isaac Newton.

By Dr. J. P. C. Kent, on behalf of the artist

A bronze medal, the work of Mr. K. A. Howes, commemorating the centenary of the Epping Forest Act. The obverse depicts Queen Elizabeth's Hunting Lodge, Chingford; the reverse is moulded from the bark of a beech, a typical tree of the Forest.

June

By Mr. C. S. S. Lyon

A. Western die-cutting styles in Aethelred's last Small Cross Type.

1. South-Western Style, Exeter, Moneyer Aelfnoth.

2. West Mercian Style, Gloucester, Moneyer Leofsige.

3. Early Mid-Wessex Style ('Southern B') Wareham Moneyer Aelfgar.

4. Late Mid-Wessex Style ('Southern A') Winchester Moneyer Oda.

B. Unique(?) use by a North-Western moneyer of an obverse die of late Mid-Wessex style. Chester, Moneyer Swegen.

By Mr. H. E. Pagan

A copy of Sir John Spelman's *Aelfredi Magni Anglorum regis invictissimi vita*, Oxford, 1678.

This edition of Sir John Spelman's *Life of Alfred*, published exactly three hundred years ago this Autumn, includes five engraved plates illustrating 117 Anglo-Saxon and similar coins. 35 of these had been illustrated previously in Speed's *History of Great Britain*, 1611, and a further 33, all from the Harkirke hoard, had also been illustrated before; but the remaining 49 coins are here illustrated for the first time.

The plates and the accompanying text were produced under the care of Obadiah Walker, Master of University College, Oxford, and a well-known scholar and writer. Walker was also responsible for the plates of Anglo-Saxon coins which appear in the 1695 edition of Camden's *Britannia*, and a comparison of the plates in his edition of Spelman and his contribution to the 1695 Camden show that of the four plates in the Camden three simply repeat the plates in Spelman—the coins on them are arranged in a different order but there is no other difference—and only one of the plates (the last) illustrates new material.

Spelman's life of Alfred is thus a source of equal importance to the 1695 edition of Camden for the state of Anglo-Saxon numismatics in the second half of the seventeenth century. The coins repeated from Speed and the coins from the Harkirke hoard will be found on plates numbered III, IV, and V, and the new material on plates VI and VII (the text says that the coins on plates VI and VII derive partly from the Bodleian Library collection, partly from the private collection of Walker himself and of Elias Ashmole, and partly from material communicated to Walker by Nicholas Johnston, a medical practitioner in Pontefract).

September

By Mr. R. H. Thompson on behalf of Mr. George Hunter

George III pattern halfpenny, 1795. Restrike by W. J. Taylor (Peck R 25).

Obv. from an altered Bermuda penny die by J. P. Droz.

Rev. from a die by C. H. Küchler. Edge plain, bronzed. Recorded by Peck in aluminium only (P. 1018). Mr. Hunter was given this piece about fifty years ago.

November

By Mr. C. S. S. Lyon

25 Anniversary Medal of the Merseyside Numismatic Society (1947-1972) in silver.

Obv. Coastline of S.W. Lancashire and Wirral peninsula, with ship, rose (for Lancashire), and wheatsheaf, the gerb of Chester. 'Merseyside Numismatic Society'.

Rev. Liver bird in shield, within wreath. 'Silver Jubilee 1947-1972'; two wheatsheaves in legend. In field, letters v & s (Vaughtons, Birmingham).

BRITISH NUMISMATIC SOCIETY

PRESIDENTIAL ADDRESS

1978

TONIGHT we celebrate the 75th Anniversary of the founding of our Society. We are in fact two days early since the inaugural meeting took place on St. Andrew's day, 30 November 1903. However, we are near enough, I think, to allow us to feel that a milestone has been reached. Three-quarters of a century is a lifetime; we have members here tonight who knew the founders of our Society and there are others here who will no doubt comment nostalgically on the past when the Society reaches its centenary in 2003.

As we are having a small party after the meeting to celebrate the occasion I shall try to keep my address fairly brief and I shall start by reporting on the year now behind us.

Membership

This year, of course, has seen a very large increase in the level of subscriptions and it was expected that some loss of membership would be unavoidable. In the event the loss has been very moderate and has been very largely offset by the addition of new members.

The total membership is now 532 compared to 535 at this time last year. Of the 532, 10 are junior members, 7 are honorary members, and the remainder are ordinary members. New members elected in the year total 20, loss of members is 23, thus giving the nett loss of 3.

While no society can regard any loss of membership with complacency I feel that under the circumstances this is not a bad outcome from the fairly drastic action we had to take in respect of subscriptions. However, I must ask all our members to lose no opportunity of introducing potential new members.

Our losses include 2 through death. We were saddened to learn of the passing of Mr. H. S. Bareford of New York who became a member in 1956 and of Mr. G. E. Chapman of Canterbury who was elected in 1969.

The Year's Programme

Attendance at meetings in the year has been most satisfactory and reflects, I think, the excellent variety and quality of the programme that was arranged for us by our Director.

It is not every year that we have a paper on an Ancient British subject and Dr. Kent's report on the Waltham St. Lawrence hoard, which he read to us in May was both scholarly and for those of us who are not closely familiar with this difficult series most interesting for the interpretive techniques used.

The Anglo-Saxon period was represented by a paper from a historian, Dr. Pauline Stafford, whose work entitled 'Some Historical Implications of regional Production of Dies under Aethelred II' was impressively innovative and original. It will no doubt provide a stimulus for much numismatic thought in the next few years. Dr. Stafford's paper had originally been intended to be given as part of a joint evening with Professor Dolley who was instrumental in arranging for Dr. Stafford to talk to us. It was with particular regret that Professor Dolley who inspired this admirable example of co-operation between numismatists and historians was unable to be present on the occasion.

The later Middle Ages were well covered in two highly specialized papers from Mr. Davis and Mr. Wood. Mr. Davis presented the results of his analytical studies on the dies of Henry III Long Cross coinage of Lawrence Classes IIIa to Ve. He demonstrated convincingly that there is much yet to be learned from this, as from many other series, by a detailed study of dies, punches, and die relationships. Mr. Wood, speaking to us in October, set before us the fruits of his study of that great mass of Edwardian sterlings of Fox Group X that numismatists for so long have found to be so intractable. His work has resolved long standing misconceptions and has carried the analysis of this important group forward to a point where acceptable

means of breaking it down and dating its elements can be seen. One feels that Dr. Lawrence and the Fox Brothers would have been excited if they could have seen how the work of Mr. Davis and Mr. Wood is refining and extending the classifications first proposed by them.

The Middle Ages also provided the subject for a paper by our Director, John Brand, entitled 'The Exchange and the Mint'. Mr. Brand is a numismatist whose interests have led him into a study of economic and administrative history. He has taken the trouble to learn how to read and interpret medieval documents and to explore these both through manuscript and printed sources. More particularly he has learned how to spot the pitfalls which lie in the path of the numismatist who tries to use historical material and to judge the real truths that lie behind the words. In his paper Mr. Brand pointed out how the scope and responsibilities of the moneyers mints and exchanges, their officers and officials, were constantly changing and he discussed these and their relationships at various stages.

A more modern period was dealt with in a paper by one of our American members, Mr. Marvin Lessen, on the subject of the Cromwell Lord Protector medal by Simon which was read for him by Mr. Linecar. Fascinating light was cast on the date of production of the medals, their survival, and the purposes for which they were presented.

Another paper on a comparatively modern subject was read to us by Mr. Dyer on the striking of proof and pattern coins in the eighteenth century. This was a joint work by Mr. Dyer and Professor Gaspar and amongst other things it very satisfactorily demonstrated that the 'fishtailing' of lettering was a result of metal flow on coins struck without a collar.

Finally, the now established practice of having an evening of short papers was repeated, this time on the subject of Tokens and Jettons. We heard notes on the subject and we shall certainly continue to have at least one such meeting on some suitable subject each year.

To all our contributors the Society offers its thanks.

Before completing this section of my report I should like to mention two other events that formed part of our programme during the year.

The first was the presentation of the Sanford Saltus Medal. As members will know it is presented once every three years to a member who is voted to have had a most important contribution to numismatic science published in the *Journal*. This year Mr. S. E. Rigold was chosen for his great contributions to the study of the sceatta and sterling series and it gave me the greatest pleasure to present the medal to him.

The other event of special note during the year was our joint meeting with the Société Française de Numismatique and the Royal Numismatic Society on the occasion of the French society's Journées Numismatiques at Rouen in June. The English participation amounted to no less than twenty-nine people. Several members of the visiting societies read papers and the event had a truly international flavour. Our French friends treated us with the greatest kindness and hospitality and those of us who were there all have the happiest remembrance of the week-end. We hope to have a return event in the not too distant future.

Publications of Journals

Since our last Anniversary Meeting members have received one *Journal*, that for the year 1976, which was sent out to members at the very end of 1977.

We are now on the point of publishing our 1977 *Journal*, in fact a volume is available for inspection here this evening. It is well worth having a look at, for as part of our review of the Society's financial position the Editorial Committee took a close look at production costs and, together with the Oxford University Press, considered how alternative techniques and newly available technological innovations could allow us to achieve economies without unacceptable loss of quality.

For the first time the text of the entire *Journal* is produced by a filmset process and the plates are reproduced photographically. The latter, of course, has been used by other numismatic publications including the *Numismatic Chronicle* for some years. We regret the loss of our collotype plates but the cost was heavy and I think members will agree that we have been able to maintain a standard that is in accord with our reputation and requirements.

Another innovation you will see is the introduction of advertisements at the back of the *Journal*. Here again we are following a practice adopted in other learned society journals some time ago and, of course, these advertisements provide us with a useful additional income that helps to defray ever increasing printing costs. We are grateful to our many friends in the numismatic trade for helping us to get off to a good start with this new feature.

I should particularly like to thank our editors for the energy and enterprise with which over the past two years they have worked with our printers to investigate, cost, and implement these changes while at the same time steadily reducing the delays in getting *Journals* into the hands of members.

The Financial Position

Our Treasurer has reported to you on our accounts as at October 31 1977 and I should like briefly to sketch out the general trend of development of the Society's affairs over the past twelve months.

In my last Presidential Address I explained that it was already evident in autumn 1976 that as a result of inflation our subscription, which had last been increased with effect from 1 January 1974, had become insufficient to meet our *Journal* production costs and that, as a result, the Society was eating into its resources at an alarming rate. Council proposed an increase in subscription to an economic level which was approved by the members at our Anniversary Meeting last year—as soon as the rules allowed, in fact. This increase was effective from 1 January 1978 and the fact that it amounted to a doubling of the ordinary subscription from £6 to £12 was a direct reflection of inflation over a period of four years rather than any attempt to recover losses of resource that had arisen through an inadequate level of subscription.

To recover those lost resources was necessary, however, because the Society no longer had the full means to provide *Journals* for all the years for which it had received subscriptions. But to recover them through an increased subscription rate was impracticable because it would take too long unless the subscription was raised to a totally unacceptable level and it would also impose a burden on members in the future for a benefit received by members in the past.

Accordingly, in 1977, I made an appeal to members for donations. I was greatly impressed by the response and by the generosity of so many of our members. Rich indeed is a Society which can elicit such support. Members sent cash, coins, and books and the total sum realized was £5,025. Taking this together with the sums donated by the coin trade towards *Journal* costs the Society has received almost £7,000 in gifts in the last 18 months.

I now regard my Appeal as closed and I wish to thank all those who contributed so generously. We shall be publishing a list of donors in the *Journal*. (See p. 153.)

The Treasurer has kindly provided me with some provisional figures for the current year and I can report that as a result of the steps that have been taken—increased subscriptions, the economies of the *Journal*, the Appeal—we can say the Society is now, if not affluent, at least on a sound financial footing. Our resources are now sufficient to pay for the 1977 and 1978 *Journals*—that is to say for the *Journals* for which we have received subscriptions—our current subscriptions are sufficient to cover current *Journal* costs, and we have a useful surplus which is available as a reserve and which can be invested to yield a good return.

It is of course imperative that we maintain and build on this sound position and so long as we suffer a high rate of inflation comparatively frequent adjustments to our subscription rate will be unavoidable. However, I am pleased to say that thanks to the economies that have been made on the *Journal* and to the generally satisfactory way in which our membership has been sustained, Council did not feel it necessary to ask for an increase for the year commencing 1 January 1979.

The Library

I like to spend a little time on this aspect of our activities because it represents a very important service to our members and also because Mr. Robert Thompson, our Librarian, and his helpers deal with a substantial part of the correspondence of the Society. Mr. Thompson provides me with an annual report and this provides the basis of what I have to say.

The use of the library in the course of the year has increased greatly. Loans of books have risen from 414 last year to 637 in 1978. There has been a corresponding increase in requests for photocopies. In dealing with a considerable volume of correspondence from all over the world on a wide variety of numismatic subjects the Librarian has asked me particularly to acknowledge the assistance of Mr. Merson and Mr. Sealey.

Entries for the Society and its library have been provided for the *International Directory of Arts*, for the valuable *Handbook of Scientific and Learned Societies*, for the indispensable *ASLIB Directory* and for *Library Resources in London and South East England*. An entry for the *Journal* volume xlvii has been listed for the *British Humanities Index*.

Donations to the library have been particularly generous this year. They include, from members: *The*

South Saxons (Mr. I. Stewart), *Newton's Correspondence*, volumes iv and vi (Mr. A. Merson), *An Introduction to Celtic Coins* by Derek Allen (Mr. A. Merson), *French Countermarks on European Bronze Coins* by Mr. Gavin Scott (Mr. G. Scott). From publishers we have received: *Anglo-Saxon England*, volumes iv-vi from the Cambridge University Press, volume ii of the great Swedish *Corpus*, *The Tudor Coinage* by Dr. Challis from the Manchester University Press, *Taverns and Tokens of Pepys' London* from Seaby Publications Ltd., the reprinted text and plates of Zagorski's work on Polish coins from the Polish Archaeological and Numismatic Society, *The Architectural Medal: England in the Nineteenth Century* by Dr. Jeremy Taylor from British Museum Publications Ltd., and *2000 Years of British Coins and Medals* by Dr. J. P. C. Kent also British Museum Publications Ltd.

Our thanks are due to all these generous benefactors for without their help it would be difficult in these days of high cost publications for the library to keep up with new publications as they appear.

Finally, from our librarian's report, we can note several important publications in the year which have not so far found their way into the library; *Monnaies, médailles et jetons*: catalogue of the exhibition at the Departmental Museum of Antiquities, Rouen, opened on the occasion of the Journées of the Société Française, and having an Anglo-French flavour; *Monnaies gauloises de Seine-Maritime* by Simone Scheers, published simultaneously; the June issue of the French Society's *Bulletin*, reporting the proceedings; *Coins and medals: a guide to the numismatic collections in the Ulster Museum, Belfast*, by J. D. Bateson; *Scripta nummaria Romana: essays presented to Humphrey Sutherland*, with contributions relevant to Britain by Richard Reece, Anne Robertson, and by Ian Stewart on 'Anglo-Saxon gold coins'; *European coin-weights for English coins* by Gerard Houben, a slightly misleading title since this booklet published in Roermond covers weights from England in addition to France, Germany, and the Low Countries; *Money and Exchange in Europe and America, 1600-1775*, a handbook by John J. McCusker (University of North Carolina Press); *Coinage in medieval Scotland*, proceedings of the second Oxford symposium on coinage and monetary history (British Archaeological Reports); *Wiltshire XVII-century tokens* by E. G. H. Kempson, published by the author and C. M. Rowe; *Tavern tokens of County Dublin* by Dr. Neil Todd (Colony Coin Company, Newtonville, Mass.), giving the results of much documentary work on issuers and analytical work on manufacturers; and *The standard catalogue of provincial banks and banknotes* by C. L. Grant (Spink and Son), a useful addition to published sources.

Coin Hoards

As has been my practice in previous years I shall briefly list the hoards which have come to light during the year. In doing this I must acknowledge my debt to Miss Archibald of the Department of Coins and Medals of the British Museum who has kindly provided me with the information. This year there are only five hoards to list:

Beddington Park, Croydon	4 AR	William I, BMC IV
Litlington, Cambridgeshire	8 AR	Henry II, Cross-crosslets.
Aberdour, Fife	277 AR	English and Scottish groats half-groats, and sterlings to Robert II.
West Wycombe, Buckinghamshire	18 AU	Henry VIII to Elizabeth I
Winsford, Cheshire	4 AU	Charles II to George I

BNS Medal

You will, I am sure, be interested to hear that a medal is to be issued by the Royal Mint to commemorate our 75th Anniversary. This is an enterprise undertaken on the initiative of the Royal Mint who will market the medals. The design has been approved by the Society and on every medal sold the Society will receive a royalty. Members will be able to purchase copies of the medal through the Society on favourable terms.

A photograph and a model of the final design of the medal are available for inspection this evening and forms for ordering through the Society are available. I hope that as many as possible of our members will be willing to purchase one of these medals which as well as providing an artistic and appropriate memento of the occasion will assist the Society's finances and should, in the way of these things, be a good investment too.

Conclusion

I now complete the first part of my address but I cannot close without acknowledging the help and support that I have received during the year from the officers of the Society and from all the other members

of Council. We now begin to see the fruits of difficult decisions taken in previous years; but we cannot relax, we must maintain our efforts to strengthen and build the Society and I have every confidence in the ability of the new Council proposed to you this evening to do this in year ahead.

(At this point two presentations were made by the Director in the absence of the President. In anticipation of performing these ceremonies himself the President had prepared the following notes which were used by the Director.)

I now come to what is undoubtedly the most agreeable part of my duties this evening. This is to make two presentations.

The first is the presentation of a special volume of the *Journal*. Council decided to continue the practice of from time to time dedicating a volume of the *Journal* to one of our more distinguished members, particularly as a way of recognizing services to British numismatics over a long period of time.

It gave me particular pleasure when your Council decided that we should dedicate volume xlvii, the 1977 *Journal*, to Mr. Francis Elmore-Jones, 'F. E. J.' to so many of us. This is because more than a quarter of a century ago it was he and Albert Baldwin who guided the first faltering numismatic footsteps of myself, as of so many others, during happy Saturday mornings at Robert Street. It was F. E. J. and Albert Baldwin, too, who in 1952 proposed and seconded me for membership of this Society as they did for so many of our members, to the great benefit both of the members and of the Society!

The occasion of this dedication is Mr. Elmore-Jones eightieth birthday which while it is not today falls into the current year. It is a great satisfaction to see Mr. Elmore-Jones amongst us this evening.

Mr. Elmore-Jones who joined the Society in 1938 has contributed much to British Numismatics. In the 1950s and 1960s there were few *Journals* which do not include his name among the list of authors and he was awarded the Sanford Saltus medal in 1956. His subjects have usually been in the field of Anglo-Saxon, Norman, and pre-1351 Plantagenet numismatics. All his publications have been marked by clarity of thought and meticulous care and scholarship. However, perhaps the quality which has always impressed those who have worked with him more than any other is his extraordinary visual memory for dies which enables him to identify the mint and moneyer of even the most battered and indecipherable Henry II cross and crosslets penny!

Mr. Elmore-Jones, F. E. J., please accept this volume as an eightieth birthday present and as an expression of this Society's respect and appreciation for all that you have so far contributed to British numismatics.

(The presentation was made by the Director to Mr. Elmore-Jones who expressed his gratification and thanks to the Society.)

The second presentation is to our most valued and esteemed Secretary Wilfrid Slayter.

Wilfrid has been our Secretary now for seventeen years and during the whole of that time has been unremittingly generous of his time and efforts for the good of the Society. I think that perhaps few of our members appreciate the burden of work involved in circulating programme cards, voting forms, and, as a result of having his address published in various places, in dealing with correspondence from innumerable sources. Wilfrid has, so far as I know, only missed one of our meetings in the last seventeen years and I cannot praise highly enough the value to this Society of his industry and constancy.

Now, Ladies and Gentlemen, a large proportion of us I think are not only numismatists but also collectors and in every collector's heart there burns that hunger for the rarity, even for the unique if it is to be had.

Wilfrid Slayter, I know, is a collector. When the idea was proposed that the Royal Mint should strike a medal to mark the Society's 75th Anniversary several members of Council said we must arrange for a special variety to be struck as a presentation to Wilfrid—perhaps in a special metal, perhaps with some special variation of the design.

When I went to the Royal Mint to approve the design I noticed that under the commemorative legend there was a leopard passant. Knowing that in these nationalistic times such an aggressively *English* symbol might not be entirely acceptable to all the membership of what, after all, is a *British* society I asked that this should be altered to the thistle, rose, and shamrock spray that one sees on the exergue of a pre-1860 Victorian penny. I asked, however, that just one medal should be cast from the design employing the leopard so that tonight we should be able to present Wilfrid with a *unique variety*.

Ladies and Gentlemen, this presentation is from members of Council who have served with Wilfrid

Slyter during his long—and we hope yet to be longer—periods of secretaryship and it gives me the greatest pleasure to hand it to him on their behalf on this, the Society's 75th birthday.

(The presentation was made by the Director to Mr. Wilfrid Slyter who expressed his pleasure and thanks to the donors.)

I had intended in this part of my address to mark our 75th Anniversary by speaking to you about the history of the British Numismatic Society from its inception to the present day. When I started to prepare my notes I realised that it would take too much time to cover the subject adequately especially in view of the social event that is to follow later this evening. I shall therefore limit myself to a brief talk about the formation and early years of our Society.

The inaugural meeting took place at 8.30 p.m. on St Andrew's day, 30 November 1903.

The first President who was elected at the meeting was P. W. P. Carlyon Britton. On the same evening the first officers and council were also elected. L. A. Lawrence became Director; R. H. Wood, Treasurer; the Revd. H. J. Duckinfield Astley, Librarian; and W. J. Andrew became Secretary. The first Council included such names as Roth, Talbot Ready, Spink, and Lever. Vice-Presidents included Lord Grantley and G. R. Askwith.

The British Numismatic Society was born out of a schism that arose within the Numismatic Society of London (which, itself, in 1904, became the Royal Numismatic Society). The series of events that led up to the formation of our Society has been very fairly and fully described by Mr. R. A. G. Carson, President of the Royal Numismatic Society in the second in the series of his Presidential addresses which together form a history of the Royal Numismatic Society. I think, however, that it will be of interest to our members on this particular occasion if I summarize these events even though to do so inevitably involves following closely in Mr. Carson's footsteps and, indeed, I must acknowledge my indebtedness to his investigations.

Briefly, what happened was that following the publication of 'The Numismatic History of the Reign of Henry I' by W. J. Andrew in *NC* 1901 a highly critical review of the way in which historical and documentary material had been handled was offered to the editors of *NC* by C. G. Crump and C. Johnson of the Public Record Office. This was explicitly presented as the work of non-numismatists, was accepted by the editors and was published in *NC* 1902. Andrew promptly resigned from the Society.

The next development was that Lawrence and Carlyon Britton, who were both members of the Council of the Numismatic Society of London protested that the editors of *NC* had acted improperly in publishing the Crump and Johnson review. They objected that Crump and Johnson were not members of the Society and they argued that the rules provided that papers should be read to the Society before being published. The editors disagreed and their position was upheld when a vote was taken in Council.

Further events happened quickly. In May 1903 the names of Carlyon Britton and Lawrence were included in the list of proposed Council members for 1903/4. At about the same time Carlyon Britton and Lawrence circulated a paper signed by themselves and by nine other members of the Society proposing that the rules should be amended to provide that papers should be read to the Society before being published.

The President, Sir John Evans, pointed out that such a rule would make production of *NC* virtually impossible and Carlyon Britton and Lawrence were persuaded to agree that a letter should be sent to all members before the annual general meeting stating that any such alteration of the rules would have that result. It thus appeared at that stage that agreement had been reached and that Carlyon Britton and Lawrence's names would go forward as prospective Council members.

This was the position at 21 May 1903. The breach was not to be healed, however. A group of Council members said that as Carlyon Britton had disclosed to ordinary members of the Society confidential matters that were under discussion by Council, they would not serve with them on the new Council if they were elected. Carlyon Britton and Lawrence refused to consent to the withdrawal of their names from the list of proposed Council members and when the names of two other members were adopted in their place the breach was finally made.

For what happened next I can do no better than to quote from an address given by Andrew, then President of the British Numismatic Society on 23 June 1909 on the occasion of the presentation to Mr Carlyon Britton of a portrait of himself commissioned by the Society from another member, Mr. Shirley Fox. Andrew, after describing Carlyon Britton as the Chief Founder of the Society said:

'I believe that it is exactly six years ago today (i.e. on 23 June 1903) since a momentous journey was undertaken by Mr. Carlyon Britton, Mr. [sic] Lawrence and myself; for it was on that occasion that Mr.

Carlyon Britton first propounded the then seemingly preposterous proposition "Let us have an all-British Society". We were on our way to Winchester on one of our archaeological excursions and the proposition when it came on us seemed to us so abnormal that we hesitated and I am afraid that I for one shook my head. I told him that long ago Mr. Sharp Ogden and I had discussed the possibility of an all-British Numismatic Society, but then, all that we could see ahead of us was, perhaps, a hundred members and financially on a hundred members it would have been quite impossible to run a journal worthy of the subject. But Mr. Carlyon Britton at once replied, "Well, I am sure that I can get two hundred at least, off my own bat", so Mr Lawrence and I undertook to act as Government—Opposition, if you like—whips to our leader. That really was the dawn of the British Numismatic Society and it was only six years ago this month."

Andrew continued in a like vein for several *Journal* pages. In his reply, Carlyon Britton described himself, Andrew and Lawrence as the Triumvirate who worked together during the early days of the Society. He also adopted a distinctly conciliatory tone when talking about there being room for more than one society—no doubt indicative of a changing sentiment which made it easier for loyal and long standing fellows of the Royal Numismatic Society, such as F. A. Walters, to join the 'British' in 1910.

Measured by any standards the new Society was a great and immediate success. 274 members had committed themselves to membership prior to the inaugural meeting of 30 November 1903. By the time of the first Anniversary meeting on 30 November 1904 the Society had reached its then membership limit of 500 ordinary members and had a waiting list. At a time when the numismatic world was much smaller than it is today this was truly remarkable—the membership of the Royal Numismatic Society at the time was about 300. Annual subscription was one guinea (the equivalent, I believe, in purchasing power of £20-5 today—so who can complain about our present level of subscriptions!) with an entrance fee of another guinea. The Society met in rooms at 43 Bedford Square which were put at its disposal free of charge by Carlyon Britton and his partner Mr. Upton. The *Journal*, then as now, the major item of expense cost about £430 to print and bind including the cost of the plates.

It is without doubt due to Carlyon Britton's energy and good connections that right from the outset the membership contained not only quantity but quality. A glance through the membership list for 1905 reveals many names of academic distinction and a strong sprinkling of institutions. The quality was not only of an academic character, however. By that year five members of the British Royal family, including Queen Alexandra, were Royal Members and there were no less than thirteen foreign royal members. In addition the Society had nineteen honorary members of whom a large proportion were foreign ambassadors accredited to the Court of St. James. One feels that the Society had made a remarkably good job of establishing its credentials in every way.

There was one respect in which the Society failed to meet its aspirations, however. Already before the inaugural meeting an approach had been made for the granting of a Royal Charter. The Numismatic Society did likewise and was granted its charter in 1904, thus becoming the Royal Numismatic Society. The British was told, not unreasonably one may suppose, that it was not the practice to grant a Royal Charter to a Society so newly formed.

The early *Journals* were handsomely produced on a strictly annual basis with well over 400 pages generously laid out on high quality paper. A glance through the indexes reveals that in the first decade of its existence the Society published many papers of first importance to British Numismatics which posterity has found to be of continuing value. The names of Carlyon Britton, Lawrence, Andrew, Earle and Shirley Fox, Morrieson, Lockett, Grantley, Helen Farquar, Nelson, and Roth occur and reoccur. Papers on war medals were more frequent then but otherwise the content was generally similar to that of today.

A great benefactor of the Society in its early years was an American member, Mr. John Sanford Saltus, who on several occasions gave generous and substantial donations. The Society had established a research fund in 1909 to finance work of extracting data of numismatic importance from unpublished public records and Sanford Saltus had contributed liberally to that. In 1910 he endowed a fund to provide a gold medal to be awarded triennially by ballot of the members to the author of the paper printed in the Society's publications which in their opinion was the best in the interests of numismatic science. As you know, this medal continues to be presented. Sanford Saltus was later and briefly to be President of the Society dying in tragic circumstances only a few days before presiding over his first meeting in 1922.

However, I have promised to restrict myself to the early years of the Society and this where I must finish. Certainly the Society got off to a fine start and it maintained a full membership, as well as the high

standards of *Journal* production it had set itself, up to about the start of the Great War of 1914-18. The distractions of that war, the gradual loss of older members, shortages of materials with which to publish the *Journal*, rising costs, and in the years between the wars, economic depression all led to a steady drop in membership and because of an unwillingness to increase subscriptions a reduced frequency of *Journals*. This tendency continued until the end of the 1939-45 war since which, I am pleased to say, membership has shown a steady upward trend.

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Balance Sheet as at 31 October 1977

1976	£	£	1976	£	£
142 Subscriptions received in advance		107.33	Investments at cost		
286 Sundry Creditors and Outstanding Charges		451.68	£900 8½% British Savings Bonds	900.00	
J. Sanford Saltus Medal Fund			£2,025 City of Cambridge Stock	2,025.00	
200 Capital Account		200.00			2,925.00
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Less Photographic Record of Doubleday			200 £200 8½% British Savings Bonds		200.00
Collection not recovered by sales	83.00		Schneider Research Fund		
167		167.00	167 Cash at Bank		167.00
Journal Provisions			150 Library at cost, less amounts written off		150.00
1976 (balance of cost)	3,570.82		10 Furniture at cost		10.00
1977 (provision towards cost)	2,219.10		465 Debtors		—
11,684		5,789.92	Cash at Bankers and in Hand		
			765 Bank—Current Account	544.24	
			7,796 „ —Deposit Account	2,701.29	
			1 In hand	18.40	
					3,263.93
£12,479		£6,715.93	£12,479		£6,715.93

Report of the Auditors to the Members of the British Numismatic Society

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit. In our opinion proper books of account have been kept by the Society so far as appears from our examination of those books. We have examined the above Balance Sheet and annexed Expenditure and Income Account which are in agreement with the books of account and no credit has been taken for subscriptions in arrear. In our opinion and to the best of our information and according to the explanations given to us, the Balance Sheet gives a true and fair view of the state of the Society's affairs as at the 31st October, 1977 and the Expenditure and Income Account gives a true and fair view of the Income and Expenditure for the year ended on that date.

Astral House, 125/129, Middlesex Street, Bishopsgate, London E1 7JF.
21 June 1978

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Chartered Accountants

Expenditure and Income Account for the year ended 31 October 1977

1976		£	£	1976		£
	EXPENDITURE				INCOME	
153	Printing, Postage and Stationery		183.16	2,675	Subscriptions received for 1977	3,061.02
	Expenses of Meetings, Rent and Library			427	Subscriptions in arrear received during the year	363.25
38	facilities		56.92	142	Income Tax Repayable	—
266	Sundry Expenses		301.85	25	Entrance Fees	25.00
	<i>Journal Expenses:</i>			410	Donations	3,177.36
	1975 <i>Journal</i>			477	Interest Received	918.75
	Cost	4,373.09			Sale of Publications:	
	<i>Less</i> Previous Provision	3,068.29		183	Back Numbers	451.99
		<hr/>	1,304.80			
	1976 <i>Journal</i>					
	Cost		3,931.54			
	1977 <i>Journal</i>					
	Provision towards cost		2,219.10			
3,882		<hr/>	7,455.44			
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£4,339			£7,997.37	£4,339		£7,997.37

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Medal to commemorate the 75th anniversary of the British Numismatic Society

The Royal Mint is casting a medal to commemorate the 75th anniversary of the founding of the British Numismatic Society on 30th November 1903. The medal is illustrated on the frontispiece of this Journal. It is designed by Mr. Robert Elderton, Modeller at the Royal Mint, and depicts, on the obverse, an Alfred London monogram penny together with the pile and trussel of a medieval coinage die set. The reverse carries a commemorative inscription.

The medal has a diameter of 3 inches, and is available in bronze at £17.50 and in silver at £40. Prices include postage, packing and V.A.T. To order, or to obtain further information, please write to The Royal Mint Numismatic Bureau, P.O. Box 9, Llantrisant, Pontyclun, Mid Glamorgan, CF7 8YT.



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